THE ANNUAL

OF THE

BRITISH SCHOOL AT ATHENS

No. X.

SESSION 1903–1904

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THE BRITISH SCHOOL AT ATHENS.

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THE PALACE OF KNOSSOS.

(Plates I.-II.)

§ 1.—The Campaign of 1904.

The fifth campaign on the Palace Site of Knossos had a twofold objective :—(1) The continued exploration of the Palace itself, with the special object of ascertaining its original elements, on which the Cists and Repositories found in 1903 had already thrown so much light ; (2) the further investigation of dependencies lying beyond what may be called the inner *enceinte*. In addition to this, the discovery of an extensive Minoan Cemetery and of a Royal Tomb went greatly to swell the volume of the year's excavation.

(1) *The Palace.*—The researches in the Palace area have been very extensive, and a variety of new data have been acquired for distinguishing the first and second period of the Later Palace. In the West wing of the Later Palace the original plan can now be clearly distinguished from the existing scheme, which is shown to be the result of subsequent remodelling. Fresh stone Repositories belonging to its first period—like those found in 1903 containing the faïence figures of the Snake Goddess and her Votaries, but less rich in relics—were found to extend North of the others beneath the later stepped Portico which here descends to the Central Court. A whole line of earlier gypsum walling facing this Court could finally be made out, a little within the later wall (§ 6). This original façade was seen to have been partly incorporated in the later constructions and partly to have been broken through by them. The West wall of the Palace itself and the adjoining Magazines belonged to the original work, but the entrances

to the Magazines were found to have been altered (§ 7). They seem to have been originally wide, but were afterwards provided with comparatively narrow doors appropriate to the valuable contents of the cists along their floors. Later, the entrances were again widened, the cists reduced to mere shallow cavities, and the whole fitted out for the reception of huge oil jars. From the superficial deposit of some of these cists belonging to the second period of the Later Palace were brought out a variety of painted stucco fragments which had fallen here from a North-West Hall above (§ 8). Among these were illustrations of the bull ring, together with other frescoes, slightly larger than the 'Miniature' paintings found in 1900, showing part of the façade of another shrine, with the 'fetish' Double-Axes stuck into its columns.

Thanks to the invaluable help of M. Gilliéron, it was further possible to carry out an elaborate scheme that I had long had in view for grouping together the earlier discovered 'Miniature' frescoes into connected designs. Two panels were thus reproduced, one showing a small temple and halls on either side, with ladies seated or standing in the foreground and throngs of men behind. The other depicted walled enclosures with trees and with similar spectators overlooking a court where gaily dressed women were engaged in a mazy dance. Fresh interesting fragments were also detected of the painted reliefs exhibiting parts of a male figure with a *fleur-de-lis* crown, and these permitted the restoration of the entire figure of what was not improbably one of the Priest-Kings of Knossos. The centre of the crown was found to be adorned with peacocks' plumes.

In the West Court of the Palace a section was cut, which has the highest importance in its bearing on the stratification and comparative chronology of the characteristic stages of Minoan culture that preceded the construction of the Later Palace (§§ 3, 4, 5). The foundation of the Later Palace was shown to have been posterior to the great age of polychrome pottery ('Middle Minoan II.'). Its second period, as appears from its Egyptian associations, did not come down later than about 1500 B.C., but there were now traceable five distinct phases of culture that separated the initial stage of the Later Palace from the latest Neolithic deposit. Below this again the Neolithic stratum, which was itself superimposed on the virgin rock, attained a depth of from six to eight metres. On the Western borders of the Palace the total depth of the human deposit was from twelve to fourteen metres.

In the North-East part of the site some of the great *pithoi* belonging to a very early Magazine have been built up. These are larger than any vessels of the kind yet discovered, attaining a height of over two metres. The Magazines have been roofed over for their preservation. The roofing of the Throne-Room had also to be carried out in a more permanent and efficient way.

(2) *Outlying Remains.*—A Minoan roadway paved with fine slabs has been traced running Westwards from the Theatral Area for a distance of over 230 metres (§ 10). The work here was very severe, as the pavement lay at a depth of nearly twenty feet below the surface, and involved the clearing away of a mass of later structures of no account. Pits sunk to the North of this line, moreover, revealed the existence of important Minoan buildings, and in order to make a preliminary exploration of these a wide cutting had to be carried out in this direction (§ 11). The structural remains thus brought to light derive extraordinary interest from their associations. A rich deposit of inscribed clay tablets was here found referring to the royal chariots and weapons. Near one of these, mentioning a store of 8640 arrows, were found the remains of two officially sealed chests containing a large number of carbonised arrows with small bronze heads. It is possible, therefore, that the structures form part of the Royal Arsenal. At this point, owing to the difficulty and expense of the work and the advance of the season, the excavation had to be broken off. It is most necessary, however, that this promising area, extending along the newly discovered roadway, should be fully explored.

During the greater part of the time I had the expert assistance of Dr. Duncan Mackenzie in directing the works, and in the present as in preceding Reports I have had the advantage of consulting his Day-Books. Mr. Theodore Fyfe was also able to devote some weeks to the architectural plans and drawings. I am also much indebted for the valuable assistance afforded by M. Gilliéron and by Mr. Halvor Bagge in the delicate task of delineating and reconstituting the works of art discovered. It must also be mentioned that, thanks to a new law passed by the Cretan Assembly, a series of duplicate specimens have been presented to the excavator.

The work began on February 15 and was continued to the beginning of July, as many as 200 workmen being employed during the height of the season.

§ 2.—THE MINOAN CEMETERY AND ROYAL TOMB.

Already by the end of February the skilful soundings of Gregori had made clear the existence of a Minoan Cemetery on a hill about half a mile North of the Palace, a little beyond the remains of the Roman City Wall that has given the name of Makryteichos to the neighbouring village. This is in fact a Northern extension of the hill of Kephala on which the Palace stands, and it was on a Northern prolongation of the same range that, later in the season, a Royal Tomb was discovered.

As my previous Reports have been confined to the Palace and its immediate surroundings, and an adequate description of the Tombs required very copious illustration, I have thought it best to issue the account of these in a separate form. The excavation of the Cemetery and Royal Tomb has formed the subject of a communication by me to the Society of Antiquaries and will be published in *Archaeologia*.[1]

The hill North of the Palace where the Cemetery was discovered is locally known as Zafer Papoura (*τοῦ Ζαφὲρ ἡ Παπούρα*). One hundred tombs were here opened, the contents of which showed that the bulk of them belonged to the period immediately succeeding the fall of the Palace. The civilisation was, however, still high, and the character of the art displayed by the relics found showed the unbroken tradition of the Later Palace Style. Among the objects brought to light were a number of bronze vessels, implements, and arms, including swords, some of them nearly a metre in length. One of the shorter swords has a gold-plated handle engraved with a masterly design of lions hunting wild goats. The jewellery and gems discovered were of the typical 'mature Mycenaean' class, and a scarab found in one of the graves is of a Late Eighteenth Dynasty type. Among the painted ware 'stirrup vases' were specially abundant, some with magnificent decorative designs. It was interesting to observe that if some graves belonged to warriors, others were certainly occupied by artisans. Thus in one interment the saw and other carpenter's tools were laid beside the skeleton.

The tombs were of three main classes: (*a*) *Chamber-tombs* cut in the soft rock and approached in each case by a *dromos*; in many cases these

[1] It will also be published (B. Quaritch) in a separate form as 'The Minoan Tombs of Knossos'

contained clay coffins, in which the dead had been deposited in cists, their knees drawn towards the chin. (*b*) *Shaft graves*, each with a lesser cavity below, containing the extended skeleton, and with a roofing of stone slabs. (*c*) *Pit-caves*, or pits giving access to a walled cavity in the side below; these also contained extended skeletons. Unfortunately, owing to the character of the soil the bones were much decayed, and only in a few cases has it been possible to secure specimens for examination. A certain number of skulls have been sent to England.

On a high-level called Sopata (*τὰ Ἰσώπατα*), about two miles North of this Cemetery, a more important sepulchral monument was discovered. This consisted of a square chamber, about eight by six metres in dimensions, constructed of limestone blocks, and with the side walls arching in 'Cyclopean' fashion towards a high gable, though unfortunately the upper part had been quarried away. The back wall was provided with a central cell opposite the blocked entrance. This portal, arched on the same horizontal principle, communicated with a lofty entrance hall of similar construction, in the side walls of which, facing each other, were two cells that had been used for sepulchral purposes. A second blocked archway led from this hall to the imposing rock-cut *dromos*. In the floor of the main chamber was a pit-grave covered with slabs. Its contents had been rifled for metal objects in antiquity, but a gold hairpin, parts of two silver vases, and a large bronze mirror remained to attest the former wealth of such. A large number of other relics were found scattered about, including repeated clay impressions of what may have been a royal seal. Specially remarkable among the stone vessels is a porphyry bowl of Minoan workmanship, but recalling in material and execution those of the Early Egyptian Dynasties. Many imported Egyptian *alabastra* were also found, showing the survival of Middle Empire forms besides others of Early Eighteenth Dynasty type. Beads of lapis lazuli also occurred, and pendants of the same material, closely imitating Egyptian models. Four large painted jars with three handles illustrate the fine 'architectonic' style of the Later Palace of Knossos, in connexion with which the great sepulchral monument must itself be brought.

The form of this mausoleum with its square chamber is unique, and contrasts with that of the tholos tombs of mainland Greece. The position in which it lies commands the whole South Aegean to Melos and Santorin, and Central Crete from Dicta to Ida. It was tempting to recognise in

it the traditional tomb of Idomeneus; but though further researches in its immediate vicinity led to the discovery of a rock-cut chamber-tomb containing contemporary relics, it was hardly considerable enough to be taken for that of Meriones, which tradition placed beside the other.

§ 3.—Section beneath West Court: Stratum belonging to the Third 'Middle Minoan' Period and its Relation to the Earliest Remains of the Later Palace (See Fig. 7).

Already since the first year's excavation the stumps of walls had been visible in the pavement of the Northern part of the West Court about 6·5 metres West of the neighbouring Altar Base. Successive winters' rains had made these remains clearer, and, as it seemed probable that important evidence of early stratigraphy might here be obtained, it was resolved to undertake their methodical exploration.

The excavation itself was carried out with minute care, every fragment of pottery being set aside according to its level. The first result was to expose below the pavement of this part of the West Court two contiguous rooms of a house, each of which had a doorway on the East side. At 92 centimetres down were traces of a floor level, and, above this, pottery characteristic of a particular phase in Minoan ceramic development.

Dr. Mackenzie, who carefully examined the ceramic remains found above this floor level, notes that none of this was polychrome in the true sense such as other ware subsequently found beneath the floor of this house. White and sometimes red designs on a lustrous dark glaze ground survived into the period to which these remains belonged, 'but yellow, orange and crimson have practically if not quite disappeared.'

'The tendency of the decoration is distinctly in a monochrome direction—simple light design on a dark, or a dark on a light, ground. The proportions of these two classes, as in the earlier Minoan wares, are fairly equal.'

This deposit was found, in fact, to coincide in character with a stratum already[1] shown to represent a somewhat later phase of Middle Minoan

[1] *J.H.S.* xxiii. (1903), pp. 179 *sqq.*

FIG. 1.—VASE WITH LILY DESIGN ('MIDDLE MINOAN III.') FROM SOUTH-EAST MAGAZINES.

ceramic art than that distinguished by the true polychrome style. The deposit in question, which lay immediately beneath the floor of the Room of the Olive Press, was, as in the present case, superimposed on a stratum containing the finest polychrome or so-called 'Kamáres' ware.

The present deposit, as that immediately beneath the Olive Room floor, is already marked by an abundance of the small unpainted cups so characteristic of the later 'Mycenaean' remains of Crete and other Aegean sites, and of which the Cave Sanctuary of Dicta afforded such plentiful hoards. With these moreover occurred somewhat similar cups of a larger and flatter type more resembling saucers. Dr. Mackenzie notes that these flat saucer-like cups are also found in the earlier polychrome deposits 'with and without a lustrous black-brown glaze. In the later period the glaze tends to be omitted altogether.'

Among other typical forms here represented was a jar of truncated pyriform shape with a pointed knob on either side of the rim and covered with an almost lustreless purple-tinted slip. This type of vessel belongs to the same class as a series of jars from the early Magazines with the 'Plaster Closet'[1] beneath the South-East wing of the Palace, some of them being ornamented with beautiful designs of lilies in white on a similar pale purplish or terracotta coloured ground. A complete representation of one of these is given for the first time in Fig. 1.

Moreover the parallel thus established between the pottery from the house-floor under discussion, and the contents of these South-East Magazines, enables us to assign to the same period a whole series of vessels, including a class of tall two-handled store jars with a rudimentary spout at times degenerating into a mere knob.

These jars, which were left standing in the early South-East Magazines, had at first been regarded as merely covered with a monochrome purplish slip. A season's rain, however, brought out upon one of them (see Fig. 2) some remarkable designs in white, the principal feature of which is a cruciform pattern with grass-like sprays between each limb. This ornamental motive stands in direct derivative relation to certain kindred patterns on vases of the preceding polychrome style. The design moreover has a special interest from the fact that a closely parallel

[1] *Knossos: Report*, 1902 (*B.S.A.* viii. p. 87 *seqq.* and p. 90, Fig. 51).

Fig. 2.—Painted Store Jar (Middle Minoan III.) from Early South-East Magazine.

motive is common to the decorative repertory of Middle Empire Egypt.

It is clear that in all the above deposits we have to do with a distinct archaeological stratum which may now be definitely classified as 'Middle Minoan III.' The existence of a similar stratum was moreover ascertained by means of test-pits at various other spots immediately beneath the pavement of the West Court, and it was also found to underlie that of the adjoining 'Corridor of the Procession Fresco.'

In the latter locality there occurred in the same deposit certain fragments of a peculiar class of large jars possessing a special comparative value. The fragments in question belonged to 'Knobbed Pithoi' like those found in the Early Magazines of the North-East Quarter[1] (Fig. 3), and again beneath the later Palace floor above the Walled Pit No. V.[2] These 'Knobbed Pithoi,' as was also the case in the fragments from the Procession Corridor, are characterised by what may be termed 'trickle' ornament—brown glaze pigment being dabbed on near the rim and allowed to trickle down the plain clay sides, so that the effect is rather that of the outside of a pail of pitch or a jar of glue. This simple form of decoration indeed was doubtless suggested by the actual appearance of jars used for coloured liquids.

'Trickle' ornament already appears on Knossian vessels belonging to the finest polychrome period.[3] Knobbed Pithoi moreover, similarly decorated, have lately been found in the Palace of Phaestos, in early Magazines near the West Court, associated with good polychrome pottery, and the origin at least of this class of vessel must therefore go back to the Second Middle Minoan Period.

It appears, however, from other evidence that the Knobbed Pithoi, the remains of which have been found on the site of the Knossian Palace, belong rather to the Third or Latest Middle Minoan stage. In the case of the deposit found on the floor above the Walled Pit No. V., attention has already been called[4] to the association of the remains of a Knobbed Pithos with part of a rim of a large jar showing white spirals on a black and

[1] *Knossos: Report*, 1902 (*B.S.A.* viii. pp. 10, 11).

[2] *Knossos: Report*, 1903 (*B.S.A.* ix. pp. 26, 27).

[3] *Knossos: Report*, 1903 (*B.S.A.* ix. p. 118, Fig. 73*c*; pp. 119, 120). The 'foreign' vessel found by Professor Petrie in an Early Dynastic tomb at Abydos, takes the history of this 'trickle' ornament still further back (see *op. cit.* p. 120).

[4] *Knossos: Report*, 1903 (*B.S.A.* ix. p. 27).

reddish-brown ground and resembling those from the Early Magazines of the South-East Palace area which now turn out to belong to this Third Middle Minoan Age.

The 'Magazines of the Knobbed Pithoi' on the Eastern slope of the Palace, where this particular class of jars first occurred, afford similar indications as to their comparative date. These Magazines are built in a cutting immediately South of those containing the very finest polychrome pottery of the 'egg-shell' class, and, it would seem, partly at the expense of these earlier store-rooms. The floors on which the Knobbed Pithoi stand are at a lower level than these, and no trace of the finest Middle Minoan ware was here found. On the other hand, the rope ornament seen on some of the jars of these Magazines is a realistic reproduction of the actual ropes used in the transport of such great vessels, and shows an earlier stage of evolution than that visible on the Pithoi of the later periods.

We are thus again led to an intermediate Period between the acme of the great polychrome style (Middle Minoan II.) and the Late Minoan Period. This result moreover is borne out by the special character of the signs cut on the blocks of the entrance pillars of the 'Magazines of the Knobbed Pithoi.' These signs are at once somewhat more compact than those of the earlier class but are more broadly and deeply cut than the generality of those belonging to the Later Palace.

The Knobbed Pithoi of this set of Magazines on the Eastern slope had been found in a much broken condition and the rains of two seasons had further served to disintegrate them. One of the tasks of the present campaign was to build these up as far as possible and to secure their future conservation by roofing over the Early Magazines in which they stood. An example of one of these as thus reconstituted and with its rim restored is given in Fig. 3. Its height is about 2·4 metres or nearly seven feet—which considerably exceeds that of the largest store-jars of the latest Palace Period.

The occurrence immediately beneath the pavement of the West Court and adjoining Corridor of the Procession of ceramic fabrics such as those described, illustrating a Third and concluding Middle Minoan phase, suggests very difficult questions in relation to the earliest remains of the Later Palace.

Unquestionably a great deal both in the style of the vase decoration and in the forms of the vessels shows strong affinities with the earliest

FIG. 3.—KNOBBED PITHOS, RESTORED (MIDDLE MINOAN III.), FROM EARLY MAGAZINE OF NORTH-EAST PALACE QUARTER.

ceramic relics from the Cists of the Long Gallery and adjoining Western Magazines as well as those of the Temple Repositories discovered last year. Yet there can be little doubt that these Cists belong to the original plan of the Later Palace and are representative, indeed, of its First Period. In this case the foundation of the Later Palace must be held to go back to within the confines at least of this Third Middle Minoan Period.

At the same time, in considering these earliest remains of the Later Palace we are struck with the following phenomena :—

1. The signs on the associated blocks, as on the jambs of the West Magazines, are of what appears to be a later style than those of East Magazines containing the Knobbed Pithoi.

2. The floral decoration, consisting of crocuses and scrolls, on the votive robes of faïence found in the Temple Repositories is identical with designs—dark brown on a buff ground—very characteristic of some of the earliest vases of a distinctly Late Minoan character.

3. The pictographic style of writing prevalent throughout the most flourishing ages of the Middle Minoan Period occurred indeed in what may now be regarded as one of the earliest Magazines of the Later Palace. By the time however when the Temple Repositories were closed we find it superseded by a form of linear script.

4. The particular form of linear script (type A) found in the Temple Repositories occurs at Palaikastro in a well-defined stratum with vases of the Earliest 'Late Minoan' class.

The general conclusion to which we are led, therefore, is that the Later Palace was founded at a time when the Third Period Middle Minoan style was already fully developed, but that, at the date when the Great Repositories and Early Cists were closed, this phase of culture showed signs of a transition towards that which has been here described as Late Minoan I. and which finds its best illustration in the beautiful Zakro vases.[1]

It seems probable that both the West Court pavement and that of the Corridor of the Procession date in their present state from some Period later than the actual foundation of the existing Palace.

[1] The note in my last Report (p. 21) on the character of the earliest culture revealed by the Later Palace contains a serious printer's error. In lines 5 and 6, for 'immediately *below*' read 'immediately *above* the original floors of the First Palace.' The terminology used in the final paragraph also requires revision in view of the more elaborate stratification now before us. For Middle Minoan I. and II. read Middle Minoan II. and III.

§ 4.—SECTION BENEATH THE WEST COURT: THE 'MIDDLE MINOAN' STRATUM (See Fig. 7).

It has been shown in the preceding Section that the building immediately beneath the floor of the West Court belongs to the Third or concluding Period of Middle Minoan culture. The walls of this construction went down 1 metre, and at a depth of 75 centimetres below this, or 1·75 metre below the level of the West Court, there came to light a floor belonging to an altogether different building. This floor in fact passes beneath the dividing wall of the two upper rooms and has no systematic connexion with the later arrangement (see Section, Fig. 7).[1]

Upon this lower floor-level and partly below the later walls lay a quantity of vases of the finest polychrome period, many of them in a quite perfect condition. From the fact that many vessels of the same form were piled in regular nests, it seems clear that we have to do with a kind of store. The cups with carinated contour, derived from metal-work, were specially abundant, and many of these were covered with a lustrous black metallic glaze. Again and again in surveying the ceramic fabrics of this great Middle Minoan Age we are struck by the parallelism presented by the Fourth Century wares of Magna Graecia and Sicily, with their lustrous imitations of silver-plate. The wealth of the Priest-Kings of Knossos in such treasure during this period—contemporary with Twelfth Dynasty Egypt—is not less clearly reflected in these imitative wares of common use than is the luxury of Imperial Syracuse in the later fabrics of 'Great Greece.'

Further representations of characteristic vessels from the same floor-level, for the most part with polychrome decoration, are given in Fig. 4. Among these the lower part of a pyriform vase marked *a* is of interest as presenting the horizontal bands of semilunar designs which characterised the large polychrome vessels found under the Room of the Olive Press, and some Middle Minoan wall-decoration from the same region. Of the other types the globular bowls *g* and *p* are distinguished by their very fine thin texture recalling that of the egg-shell ware from the North-East Palace

[1] About 25 centimetres above this floor-level and between it and that of the rooms above (Middle Minoan III.) were remains of some intermediate walls of no importance.

Fig. 4.—Pottery (Middle Minoan II.), mostly Polychrome, from Chamber beneath West Court.

region. The bowl *g* with its elaborate pattern is reproduced on a larger scale in Fig. 5, (2).

The occurrence of large groups of vessels belonging to the period of this fine polychrome fabric, lying *in situ* and practically intact on a Middle Minoan floor, has now repeated itself in various parts of the Palace site[1] and of the surrounding Town. This recurring phenomenon best explains itself by a general catastrophe that must have overwhelmed the Town and Earlier Palace at Knossos during the mature polychrome period.

FIG. 5.—POLYCHROME VESSELS (MIDDLE MINOAN II.).
(1) From North-West Pit; (2) from Chamber below West Court.

That this catastrophe was separated by a certain interval of time from the Latest Middle Minoan Age represented by the rooms immediately beneath the West Court pavement is further shown by the existence of two intervening stages of habitation visible in the section here explored.[2]

We have here then the evidence of a period of bloom, destruction, and gradual recovery leading upwards to a new phase of culture—the Middle

[1] Notably in the case of the earlier rooms beneath that of the Olive Press and of the 'Kamáres' Magazines of the South-East Palace Quarter.

[2] Traces occurred of a somewhat higher floor, still of the same polychrome period, 25 centimetres above that with the well-preserved vases. Independent again of this and immediately superimposed on it was a wall-system consisting of a room with a doorway. Both these walls, the foundations of which lay at a depth of 1·50 metre below the pavement of the West Court, and the intervening floor were alike anterior to the rooms of the Third Middle Minoan Period described in the preceding section. The floors of these latter lay 50 centimetres higher up and had no relation to any part of the lower systems.

FIG. 6.—POTTERY, MOSTLY POLYCHROME (MIDDLE MINOAN II.), FROM NORTH-WEST PIT.

Minoan III. of the preceding Section—which in turn was the immediate forerunner of the Late Minoan and affiliated Mycenaean styles.

It is to be observed that in the Section beneath the West Court pavement with which we are dealing there are no relics representing the beginnings of the polychrome style or the First Middle Minoan Period to which these belong. This, however, does not exclude the possibility that the present floor-level may have gone back to that Period, since what is found on a house-floor naturally belongs to the latest days of its occupation.

A floor-level with well-preserved polychrome vases analogous to the present had been discovered in 1903 in the contiguous North-West Building. It was here indeed that was found the most elaborate vase of the polychrome style as yet discovered. In the neighbourhood of this there had already come to light part of what appeared to be a rubbish pit containing more fragmentary remains of vessels of the same Period. The exploration of this was continued during the present season, with the result that a mass of polychrome pottery of the finest quality, mostly fragmentary, though in some cases allowing of more or less complete reconstitution, was brought to light. A few typical specimens from this pit, of the polychrome class, are shown in Fig. 6.[1]

§ 5.—Section beneath the West Court: 'Early Minoan' and Neolithic Strata (See Fig. 7).

Beneath the Earliest 'Middle Minoan' floor-level of the West Court Section there came to light lower parts of three walls belonging to a pre-existing building. It was to be observed, moreover, that while the various Middle Minoan wall-lines had followed an orientation exactly corresponding with that of the Later Palace, these earlier walls followed a somewhat divergent course and belonged to a quite different system.

These earlier structures belonged to what seems to have been an

[1] *p* shows designs like double axes. The 'asterisks' on *f* are typical of some of the lustrous 'egg-shell' cups from the North-East quarter. *h* is shown on a larger scale in Fig. 5. It is a fine example of the 'egg-shell' fabric. *b* with the crocus-like designs seems to belong to the Third Middle Minoan Period: a small proportion of later elements was included in this deposit. Mixed in almost equal proportions with the pottery from this pit representing the mature polychrome decoration on a dark ground, there was brought out—as from the contemporary floor-level of the West Court—an abundance of fragments with dark designs, generally of a simpler style on a buff ground. Together with these, moreover, was another well-marked class displaying, on the same buff ground, white or white-bordered patterns.

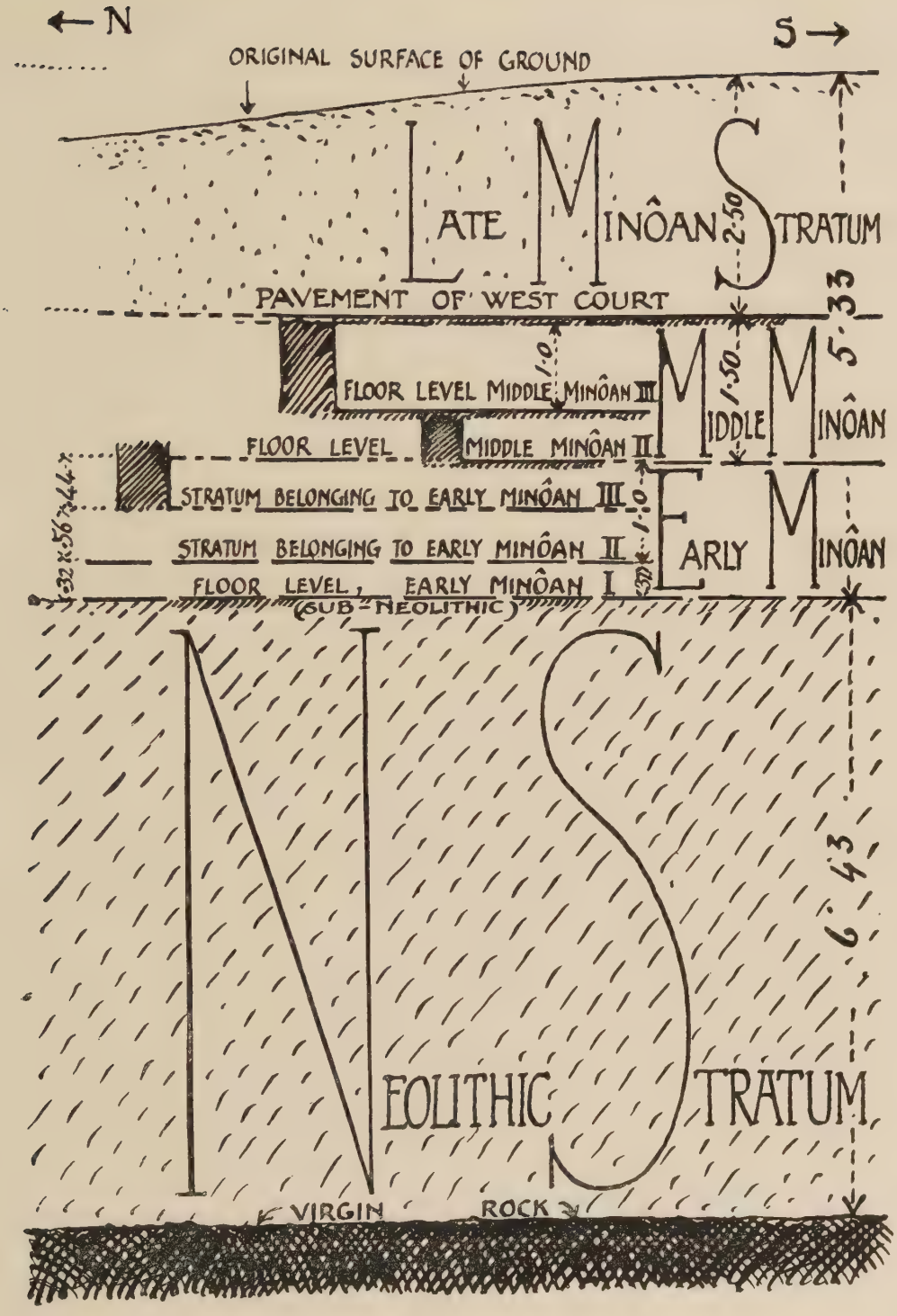


FIG. 7.—DIAGRAMMATIC SECTION OF STRATA, BELOW PAVEMENT OF WEST COURT.

enclosure with a South side 9·8 metres in length from which short sections of two other walls run North at right angles. The longer wall, of which two sections were traced, terminates in an anta showing that there was a doorway in the North-East corner of the enclosure. The Easternmost of these walls had been partly used as a foundation for a Middle Minoan wall running at a somewhat different angle. The longer wall, of which most remains, is of good ordinary masonry better built than the walls of the system above it. It is preserved to a height of 70 centimetres.

A plaster floor-level was traceable in connexion with these early walls, layers of it, several times renewed, being perceptible in and on both sides of the doorway.[1]

Unfortunately the small extent of this floor hitherto excavated and the paucity of the relics found on it only permit us in a general way to refer it to the Latest Early Minoan Period (III.). For a fuller notion of this stage of culture the best evidence is still supplied by the relics found in the cavity below the floor of the Room of the Stone Vats,[2] by the hoards of vases from the Well near the oil-spout on the East slope, and by the earliest elements unearthed in the basement room with the Stone Pillars at the South-East Palace angle.[3]

At a depth of 56 centimetres below the last-mentioned stratum occurred another floor-level with which, however, within the limits of the area laid bare, it was impossible to correlate any lines of walling. The remains above this floor-level were of a fragmentary nature, no vases being found intact upon it as in the case of the Middle Minoan floor with the fine polychrome pottery. The character of the sherds from this layer must therefore be regarded as a whole.

This deposit, from the position that it holds in the general stratification of the section, may provisionally be regarded as representing the Second Early Minoan Period. Among the sherds here found a fair proportion attested the survival of the Neolithic class of fabrics with hand-polished surfaces either dark or light. The more limited use of this early process went on indeed to a much later time.

[1] Dr. Mackenzie notes as an interesting feature of this floor that 'it is seen in section to ascend in a step up North.' The North connexions, however, as yet remain unexcavated.

[2] *Knossos: Report*, 1903 (*B.S.A.* ix. pp. 94–98).

[3] *Knossos: Report*, 1903 (*B.S.A.* ix. pp. 17–19).

At the same time the art of covering the face of vessels with a lustrous black slip as a substitute for the dark Neolithic hand-polished face was fully matured during this Second 'Early Minoan' Age.

As a result of a careful examination of the pottery in this stratum Dr. Mackenzie writes:

'Leaving out of account the coarser sherds it was found that fragments with a dark ground, though slightly in a majority, were in fairly equal proportions with those showing a light ground. Against 35 with a dark glaze slip there were 34 with a buff clay surface. Of those with a dark glaze slip 10 had geometrical or band decorations in a dull cream-white pigment. Of those with buff clay surface 18 had band or geometric decoration in slightly lustrous or lack-lustre brown-to-black glaze on this light ground. Regarding the finer fragments with the dark decoration on the light ground it has to be noted as important from the point of view of development—(1) That the kinds of vessel with a dark ground are the same as those with a light ground. These are two-handled or one-handled spouted jugs, cans, cups, bowls and plates. (2) That the decoration is of essentially the same geometric character whether light or dark.'

Dr. Mackenzie rightly insists on the importance of this parallelism in view of the later developments of Minoan ceramic art. Both classes pass through the same geometrical and curvilinear stages of decoration. The monochrome decoration, dark on a light ground, which finally triumphs in the Late Minoan Age, and of which we see the outcome in the so-called 'Mycenaean' class, 'is marked by an unity of character which was previously common to all Cretan painted pottery whether with a light or a dark ground.'

Two vase fragments from the above deposit showed a curious transitional technique midway between that of the pure Neolithic and the later painted ware. Here 'a broad band was left below the rim unpolished and then narrow parallel horizontal bands were drawn along this dull surface by means of a blunt instrument, probably bone. The result was that the dull parts looked like lighter bands on the lustrous dark ground, and indeed, when looked at carelessly, the surface appeared as if the dull parts were produced by means of a white colour that had partly faded away.'

Underneath the above floor-level, here qualified as Early Minoan II., was another layer only 32 centimetres in thickness, 2·82 metres below the level of the West Court pavement, and superimposed on a floor or clay platform immediately overlying the pure Neolithic deposit. The character of this stratum resembled that immediately above it in that it contained simply fragments dispersed throughout it. The fragmentary remains contained by it presented, however, a homogeneous aspect. There was no sign of disturbance involving the intrusion of later elements, and the deposit therefore, as in the case of that of the floor-level immediately above it, could be judged as a whole and as generally representing the fabric of a given Period.

This stratum, to which the name 'Early Minoan I.' may be conveniently applied, shows naturally a greater survival of Neolithic elements than the preceding. In its general complexion indeed it may be described as 'Sub-Neolithic.' No wall-system was found in connexion with the parts of this floor-level that were uncovered.

A series of fragments from this level has been thus analysed by Dr. Mackenzie:

'Of the sherds examined (apart from 186 coarse and uncharacteristic specimens), 50 fragments, or about two-thirds of the total, resembled the Late Neolithic. Of the remaining 18 a slight majority had a light buff ground, while 8 had a dark glaze slip ground.' In some instances there was visible the Neolithic "rippling" of the surface,[1] the tradition of which survives in its painted imitations right down through the Middle and Late Minoan ceramic series.'

As in the case of the Late Neolithic strata of Knossos the wares here found, including the black hand-polished class, showed a reddish core when broken, implying that during this and the preceding period an improvement had taken place in the firing as compared with the Earlier Neolithic fabrics. On the other hand, as in the immediately preceding Neolithic class, there is a falling off in the finer kind of incised and punctuated decoration with its white gypsum inlaying. There were only three incised fragments, and their incisions were 'of an inferior or uncertain narrow or flat and superficial character.' The same falling off was noticeable in the case of an incised hand-polished fragment from the immediately overlying stratum. The incisions here were very faint and narrow and, as in the other examples, without white filling.

The imperfect fixing of white painted decoration on a hand-polished surface, and its consequent disappearance in many cases, made it difficult to determine whether any fragments from this deposit might be taken to illustrate the beginnings of this class of painted ware. The indications however were in favour of that view. One fragment moreover showed 'parallel bands consisting of closely placed vertical scratchings which seemed to be the reminiscence of dull-white bands on the dark grey-black hand-polished surface. What we have here is not the imitation of the Neolithic incised ware, but of dull-white painted bands on a dark ground.'

The full development of the incised decoration with its white gypsum filling marks what may be called the 'Middle Neolithic' strata of the Knossian series. The decadence and gradual disappearance of this decorative method observable in the succeeding deposits of the Latest Neolithic and Earliest 'Minoan' periods was in part at least the effect of the increased proportion of walls with a light ground due to the better firing of the clay. This decline was also doubtless hastened by the gradual rise of coloured ornament.

The fact, however, that this decadence should thus characterise the

[1] See Mackenzie, 'The Pottery of Knossos' (*J.H.S.* xxii. p. 160 and Pl. IV. Figs. 6–14).

Latest Neolithic and Earliest 'Minoan' strata on the site is of considerable importance in view of a phenomenon that meets us among the fabrics of a somewhat later date, namely, the Third Early Minoan Period. This stage, as already noticed, is well represented in the deposit found in 1903 beneath the floor of the Room of the Stone Vats, but among the vases there discovered the incised and punctuated ware with white inlaying is represented by a well-preserved clay 'pyxis' and the lid of another. When it is remembered that the type of vessel with which this technique is here associated is of constant occurrence in Cycladic graves such as those of Amorgos belonging to the contemporary Early Metal Age of the North Aegean, and that this practice of incising and inlaying pottery, which had practically died out in Crete, was still in full vogue in that quarter, it seems probable that the incised clay boxes from the deposit referred to were either actually articles of import or due to the operation of a strong Cycladic influence.

The surface and texture, and even to a certain extent the form, of the vases of the dark-faced hand-polished class belonging to the Sub-Neolithic stratum (Early Minoan I.) with which we are dealing, as well of those of the immediately underlying Late Neolithic deposit, suggest interesting comparison on another side. Among the First Dynasty remains excavated by Professor Petrie at Abydos[1] were certain vessels with a black surface, in some cases hand-polished and with burnished vertical striations, which were quite un-Egyptian in character. Professor Petrie, who during a recent visit to Knossos was able to place the fragments side by side, justly observes that a piece of the neck of the largest of the Abydos vessels which he had taken with him for comparison was 'indistinguishable in colour, burnish, and general appearance' from Late Neolithic or Sub-Neolithic Cretan specimens (see Fig. 8). One of the shapes represented by the Abydos vases with a hollow sub-conical base supporting a bowl-shaped recipient is very characteristic of the Cretan series.

The fragmentary character of the Late Neolithic and Earliest Minoan pottery from Knossos prevents as yet the establishment of anything like complete comparisons, but the parallelism is at least of such a nature as to warrant the conclusion that these non-Egyptian vessels found at Abydos are contemporary with the Cretan types, and that they stand in

[1] W. M. Flinders Petrie, *Abydos*, Part II. p. 38, and Pl. XLII. Figs. 20–36.

direct relation to them. The red-ochreous colouring material found in some of the Abydos bowls corresponds with the pigment so largely used in Crete in the succeeding Period for ceramic decoration, and if this was an early article of export from the island the presence of vessels of transitional Neolithic type on Egyptian soil would be easily explicable. That there was already a direct intercourse between Crete and Egypt during the time of the first four Dynasties has been already demonstrated, not

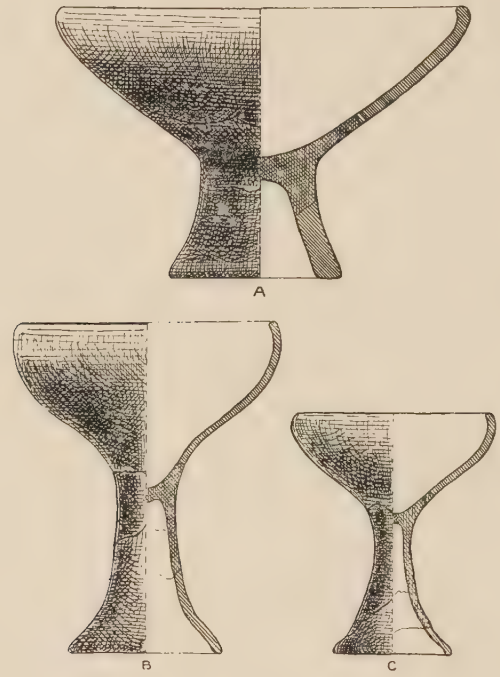


FIG 8.

(*a*) VESSEL OF FIRST DYNASTY DEPOSIT, ABYDOS; PARTLY RESTORED.
(*b*, *c*) VESSELS FROM SUB-NEOLITHIC STRATA (EARLY MINOAN I.), KNOSSOS; PARTLY RESTORED.

only by the imitation of Egyptian stone vessels of that period by the native Minoan lapidaries, but by the actual importation of such.[1]

In these ceramic parallels we have another important link of connexion between the very beginning of what may be termed the Minoan

[1] See *Report: Knossos*, 1903 (*B.S.A.* ix. p. 98, Fig. 67).

Age proper and the First Egyptian Dynasty,—an indication of great comparative chronological value.

Immediately beneath the clay platform or floor-level with the transitional ceramic relics described above as 'Early Minoan I.,' begins the pure Neolithic deposit, which at this point was found to attain a thickness of 6·43 metres, as against 5·33 for all the 'Minoan' and superficial strata put together. The soft virgin rock was here reached at a depth of 11·73 metres from the surface of the ground.

There is every reason for supposing that the more primitive deposit was at least as slow in accumulation as those above it. The probability indeed lies in the other direction—namely, that the accumulation was more gradual. But even assuming an equal rate of deposit for the Neolithic strata, the evidence presented by the West Court Section (Fig. 7) points to a vast antiquity for the earliest human settlement on the hill of Knossos. The rough equation established between the beginning of the 'Early Minoan' Age and the First Egyptian Dynasty would, if we take the very moderate computation of Lepsius, carry back this stratum, which is 5·33 metres below the surface of the ground, some 5800 years—giving a rate of deposit of somewhat under a metre for a millennium. If we assume an equal rate of deposit for the underlying Neolithic strata, which have a thickness of 6·43 metres, it is evident that we must go back about 12,000 years for the beginning of the Stone Age Settlement. It must moreover be remembered that in some neighbouring test pits the Neolithic stratum attained a thickness of over 8 metres, which at a moderate estimate would imply an antiquity of some 14,000 years.

This deep Neolithic deposit forms a vast mound on which all the later structures and deposits of the Palace Hill of Knossos are superposed, and of which the hill itself—analogous to an Egyptian or Babylonian 'Tell'—is largely made up. The various strata of this deposit are not, as in the case of the overlying 'Minoan' remains, separated by definite floors; but a distinct succession of progressive stages of primitive culture, marked by more or less constant metre levels from the bottom of the deposit, can be clearly made out.[1]

It is impossible now to enter on a detailed consideration of these successive stages, which need a very broad survey of the comparative

[1] For a general summary of results, as regards the Neolithic pottery, see Dr. Mackenzie's article in *J.H.S.* xxiii. pp. 158–162.

material for their adequate study. The West Court Section, however, derives a special importance from the clear upper line of delimitation afforded by the Early Minoan floor level. The context thus supplied enables us to trace the gradual evolution of the higher out of the lower elements of the local culture under specially favourable conditions. From this point of view the characteristics presented by the pottery of the uppermost Neolithic stratum, immediately below the 'Early Minoan' floor, are extremely instructive.

The results of an examination of the pottery contained in the uppermost metre of the Neolithic deposit of this Section are summarised as follows by Dr. Mackenzie :

'The pottery was found to have unmistakable marks of lateness. (1) Where incision occurs it is superficial and scratchy, with no trace of the earlier white filling. (2) The hand-polished surface tends to lose the consistency of its brown-to-black lustre, and this result may have been due to the introduction of the potter's oven. The use of the potter's oven tends itself to bring out a terracotta or buff surface, even when it was meant to secure the traditional brown-to-black hand-polish. (3) The outcome of this becomes visible in the indications of a further stage, in which the buff surfaces, whether hand-polished or unpolished, are sought out on their own account.' Henceforward, as Dr. Mackenzie points out, 'the buff surfaces have a differentiated existence of their own, which from this time onward has a continuous history through all the successive Minoan periods. The light surface invited the dark geometric glaze decoration of the next Age. In fact it preceded the light decoration on the dark ground. The long tradition of the hand-polished Neolithic dark surface had first to be overcome before light design on a dark ground could be carried out.'

It will be seen that at Knossos there is no real break of continuity between the Stone and Early Metal Ages, nor indeed between the latter and the more elaborate civilisation of the Middle and Late Minoan Periods.

§ 6.—The Earlier West Façade of the Central Court: and Discovery of further Cists belonging to the First Period of the Later Palace (See Pl. I.).

The principal discovery within the Palace walls of 1903 had been the great Stone Cists or Repositories containing what appear to have been the fittings of a small shrine of a Snake Goddess. The position of these below a later paved floor, provided with cists of much smaller dimensions, as well as the ceramic and other contents, showed that we had

here to do with remains belonging to an earlier stage of the Palace history, separated from the later by a considerable remodelling. The closed cists beneath the Magazines, and the further discovery of the cists below the floor of the Long Gallery, supplied further indications of the same early phase of the building. The faïence and other inlays, and the early pottery with white design on a dark ground found in some of these cists, showed moreover that their construction must be referred to the same early period of the building as the Temple Repositories.

The investigations of the present season within the West Palace quarter have thrown fresh and unexpected light on the original arrangement of this part of the building, and on the extensive character of the remodelling which it subsequently underwent.

In considering the plan of this quarter of the Palace where it borders the Central Court, a curious phenomenon had already arrested attention. This was the appearance at intervals along this front of an interior as well as an exterior line of gypsum walling separated from the other by an interspace of a little over a metre's width. The fact that, as a rule, such gypsum construction was reserved for outside walls had already given rise to a suspicion that this inner line, in fact, represented an earlier façade, afterwards incorporated in an enlarged structure.

The results of this year's investigations leave no remaining doubt that an inner and earlier frontage line existed immediately West of the later border of the Central Court (see Plans *A* and *B*, Pl. I.). It is clear, moreover, that like the West wall of the Palace, and that of the Palace of Phaestos, this early façade was not carried out in a straight line, but showed a series of shallow bays and slight returns throughout a large part of its course.

The first traces of this inner wall line are visible immediately East of the Court of the Altar (see Plan *A*, Pl. I.). At a point nearly answering to the Northern limits of this Court the old façade took a short turn Eastward. Here, by the 'Room of the Chariot Tablets,' the earlier and later wall-lines are very clearly visible, and in this case the interspace between them seems to have been used as a kind of inner magazine or repository at the back of what has the appearance of an official bureau.[1] A narrow doorway was for this purpose broken through the earlier line of wall, which thus gave access to a small elongated chamber

[1] See *Report*, 1900, pp. 30, 31.

between the original and the later walls of the façade. Shut in between two walls, both of which were provided with gypsum faces and intended as outside structures, this inner chamber must have had something of the character of a strong room.

The interspace in question was also very noteworthy immediately East of the chamber containing the two early Repositories. The East wall of this chamber itself represents a section of the original façade. Here, outside the gypsum face of this wall, and between it and the later wall-line bordering the Central Court, is a small elongated compartment, with a floor about 8 centimetres above the level of the Court. On this floor, which consisted of burnt clay, were found some of the clay seal-impressions showing an armed Goddess on a lion-guarded peak, which already in 1901 had led me to the conclusion that this compartment had formed part of the front of a shrine.[1] We have here indeed an indication of the continued dedication of this part of the building to a religious usage, but it is now clear that the floor-level on which the seal-impressions lay belongs to the time that succeeded the great remodelling, and has to be brought into connexion with the new line of frontage on the side of the West Court.

Further exploration, however, has now revealed, about 23 centimetres beneath this floor-level, an earlier floor paved with small limestone slabs, which were found to go under the later wall-line facing the Central Court. We have here, therefore, a pavement standing in relation to the inner or original façade on this side.

A noteworthy feature about the gypsum blocks of this section of the original façade is that they exhibit, on their outer sides, certain incised signs answering to those found elsewhere on blocks belonging to the earliest structures of the West Palace wing including the jambs of the Magazines along the Long Gallery. A special characteristic of the signs of this period—which may be defined as 'Middle Minoan III.'—is the occasional recurrence of compound signs, such as the combination of a Double Axe with a Trident or Branch, or of the 'Window' sign with a Star or Cross Paté. A similar phenomenon—which has an obvious chronological value—recurs on one of the gypsum blocks of this section—the sign here represented being a combination of a Double Axe and a Star. The separate association of these two signs on a block is seen in one of the early galleries of

[1] *Knossos: Report*, 1901 (*B.S.A.* vii., p. 28 *seq.*).

the South Front. The eight-rayed 'Star,' of a type frequent on the jambs of the West Magazines, also occurs, by itself, on a block of the old façade at this point. These parallels derive additional importance from the evidence adduced in Section 7 below as to the great antiquity of the jambs of the Western Magazines—which seem to have been in existence at the time of construction of the earliest Cists in that quarter.

By the North-East Corner of the room containing the Temple Repositories, and at the North end of the last mentioned interspace, the old inner façade breaks off abruptly in a gypsum block, the outer end of which is splayed back. The point where it breaks off corresponds with the line of the Southern boundary wall of the Vestibule and stepped approach of the Hall of the Jewel Fresco, belonging, as we now know, to the latest period of the Palace. At this point there is a real breach in the original frontage wall, filled by two principal creations of the final scheme of remodelling—by the Vestibule, namely, of this upper Hall and by the Antechamber of the Throne Room that lies immediately to the North of it. The lines of steps that lead up to the former of these constructions and down to the latter follow the later frontage-line of the Central Court.

That the older façade wall, however, originally continued across this gap[1] is shown, as will be more fully pointed out below, by the occurrence of a rounded corner of the same gypsum walling beyond the Antechamber of the Throne Room and in line with the last-mentioned section.

In order to ascertain whether any traces of the earlier arrangement existed in the area occupied by these later buildings it became necessary to proceed to a thorough investigation of certain obscure constructions underlying the Vestibule of the Hall of the Jewel Fresco.

A first result of these investigations was to bring to light eight upright lining slabs of gypsum, following a line parallel to that *ex hypothesi* followed by the old façade, and a little within it.

West of these lining slabs, and separated from them by a space of 1·25 metre, remains of another similar series of slabs became visible, parallel with the others, and between the two a well compacted pavement of lime-

[1] Dr. Mackenzie is of opinion that certain remains of wall foundation, extending North in a direct line from the point where the old façade breaks off, are to be regarded as supplying a definite trace of its further continuation for a distance of 2·75 metres.

stone slabs.[1] We had here, therefore, a narrow Corridor or Magazine running just inside this section of the old façade wall.

The paving slabs of this were at first taken by us for solid blocks of gypsum belonging to a massive wall. Further examination, however, showed that we had here to do with a pavement of the usual kind, and, on pursuing the investigation below, it was found that, as in the case of the Long Gallery, the pavement masked the original existence of a series of Cists.

Three large limestone Cists or Repositories were here brought to light (see Pl. I. B), the Eastern border line of which nearly corresponded with that of the gypsum lining slabs on that side. Of these Cists that to the South was the largest, its width exactly answering to that of the pavement above, so that the slab forming its Western wall coincided with the line of the gypsum facing slabs of the Corridor on that side. (See Fig. 9.)

It was observable that, as in the case of the early Cists underlying the Southern end of the Long Gallery, a small interval—in this case 6 centimetres—filled with a well-defined clayey stratum separated the top of the walling slabs of the Cists from the pavement and lining slabs above. At the same time the correspondence of the exterior lines of the upper and lower structures indicates a systematic connexion between the two. The existing lines were consciously followed, and neither here nor in the case of the Long Gallery was there any real break in continuity.

The Cists are embedded in the Neolithic deposit which, owing to the planing off of the intervening strata in this quarter, everywhere underlies the Later Palace constructions. The southernmost Repository is the largest of the three, being 1·17 metre in width, with a length of 1·60 metre and a depth of 83 centimetres. The other two were slightly narrower—1·04–0·98 metre—but otherwise showed the same dimensions. The Cists were contiguous, the same dividing slab serving for those on either side of it like the Northern series in the Long Gallery. Their plan and section, with the method of construction, are sufficiently shown in Figs. 9 and 10 and Pl. I. B.

Here, then, in an immediately contiguous area, had come to light an extension of the same system of early stone Repositories as had already,

[1] These lining slabs were at first mistakenly regarded by us as the outside lining of a thick wall, represented by the later filling in between them, necessitated by the structures above.

in 1903, afforded the splendid discovery of the Sanctuary relics. The exploration of the present series of Cists was unproductive of any finds comparable with these, but at the same time the ceramic and other remains found in them were sufficient to show that the contents had originally been of a similar kind and that they had been closed at the same time as the neighbouring Temple Repositories.

These remains were principally contained in the Southern and Middle Cists. Among them were fragments of gold leaf and the leg of a

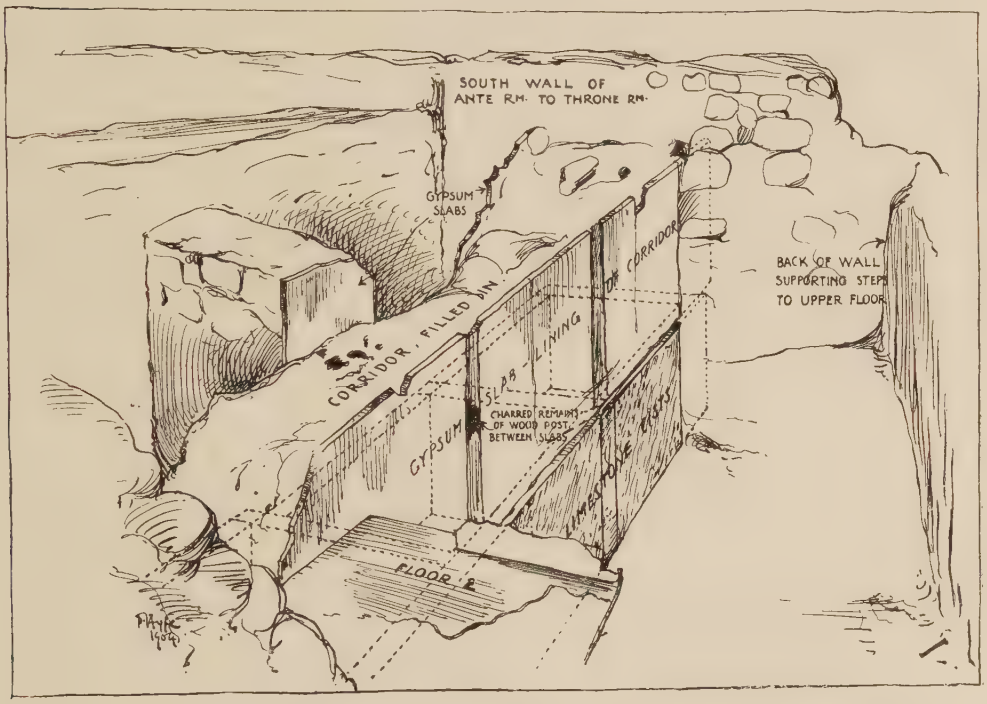


FIG. 9.—SKETCH SHOWING E. SIDE SLABS OF CISTS AND LINING SLABS OF CORRIDOR BELOW LATER VESTIBULE

miniature figure of an ox or bull executed in the round in the same fine faïence as the figures of the other Repositories. Fragments of similar vases with white design on a dark ground also came to light, and others with figures of birds of a reddish-brown hue on a pale buff ground which answered to the imported, apparently Melian, class found in 1903. Besides

these there were remains of three large stone lamps that may have belonged to the Sanctuary fittings.

In the paved Corridor above, which must be referred to the close of the Period during which the Cists below were in use, were found fragments of a clay pithos of an earlier type than those of the Latest Palace Period as seen in the West Magazines and elsewhere. A further indication of the approximate date of this early Corridor or Magazine had been supplied by a discovery made in the first year's excavations. In a rectangular space immediately West of it, possibly answering to another parallel Magazine, there were then found a high pyriform vase and other fragments of pottery with white design on a dark ground. These

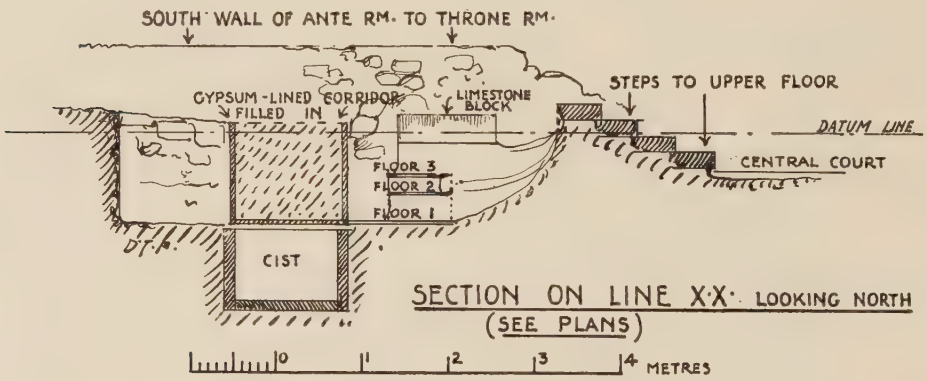


FIG. 10.—SECTION BENEATH VESTIBULE OF HALL OF JEWEL FRESCO SHOWING EARLIER CISTS, CORRIDOR, AND FLOOR LEVELS.

occurred above a clay floor-level 2·20 metres below the surface—in other words, almost exactly corresponding with the top of the newly discovered Cists. The ceramic types there exhibited practically correspond with those deposited in the Cists and Temple Repository.

The Corridor or Magazine to which these three Cists belonged was closed at its South end and had been therefore approached from the North. The northernmost Cist was found to partly underlie the South wall of the Anteroom of the Room of the Throne, and traces of the pavement above it going still further into the thickness of the wall showed that the Corridor had continued beyond so as to traverse at least a part of the area later occupied by this Antechamber.

The Eastern facing-slabs of this Corridor were, as already noted, the inner coating of a wall. On the outer side of this wall a succession of floor-levels, perhaps belonging to quite small cist-like compartments, was brought out. (See Section ; Fig. 10.) These show that a considerable interval of time must have elapsed between the period when this wall was constructed and the later period to which the existing remains of the Vestibule of the Hall of the Jewel Fresco are to be referred. A limestone block jutting out East from the earlier line belongs to this intermediate system.

Dr. Mackenzie notes about this block that 'it is 1·15 metre long East-West, 0·55 wide, and 0·32 high. Its best face is South and it rests on a substructure of smaller masonry, with faces South and West, but rough to East. The top of the block is about 0·80 from the surface. The South face shows red stucco and then white stucco going down to a floor-level with white cement at 1·50 metres from the surface and ·70 from the top of the block. Below this floor is white wall stucco and yellowish floor cement at a depth of 1·70 from the surface or 0·90 from the top of the block. This floor-level is itself 45 centimetres above the level of the adjacent South Cist.'

'On the West face of the same construction again is white wall stucco going down to a floor 2·5 metres below the surface of the ground or 1·25 below the top of the block. This floor in turn is 12 centimetres above the top of the Cists, so that it in turn must be of later date than they. The floor has underlying it a pale clayey earth similar to that which covered the tops of the Cists.'

At this point, then, we have the evidence of at least three successive stages of construction intermediate between the newly discovered Cists and the final remodelling to which the Vestibule above was due.

It has been already noticed that the northernmost of the three new Cists together with a continuation of the Corridor pavement runs partly under the wall which separated the Hall of the Jewel Fresco from the Antechamber of the Room of the Throne. At this point the original line of the old façade wall was entirely broken through by the excavation necessitated by the construction of the Antechamber. Beyond this room, however, the original existence of this outer line of wall enables us to place in their proper relation the rounded corner of fine gypsum blocks excavated already during the season of 1900.[1] This construction now reveals itself as a rounded turning-point of the earlier façade, adapted

[1] See *Report*, 1900, p. 35, Fig. 7.

as part of an inner corridor in the remodelled building and thus exceptionally well preserved.[1]

'Branch' signs appear on the face of these corner blocks closely resembling those on the door jambs of the thirteenth and fourteenth Magazines.

The rounded corner of the old façade line visible at this point, whatever its exact significance, cannot be taken as evidence that the Later Palace in its original form did not extend North of this point. There is, on the contrary, abundant evidence of the great comparative antiquity of the quarter of the building that lies to the North-West of the Central Court.

§ 7.—Earlier Arrangement of Doorways in the West Magazines.

It will be remembered that during the previous season a long line of Cists were brought to light beneath the later pavement of the Long Gallery. This discovery, coupled with the evidence of closing or shallowing of similar Cists at more than one period in the adjoining West Magazines, suggested further investigations into the successive changes carried out in this great storage department of the Later Palace during the various phases of its history.

In several of the Magazines narrow slabs of gypsum were visible in the pavement on either side of the entrance which had at first been taken to represent the side walls of Cists. On examination, however, these proved to be old door jambs which had gone into disuse at the time when the later pavement was laid down.

The most perfectly preserved remains of this earlier arrangement were brought out at the entrance of the eighth Magazine (see plan, Fig. 11). On each side of this, gypsum door jambs of the usual type with a ledge for supporting the paving of the threshold had been set within the massive stone jambs of the original construction so as somewhat to narrow the doorway. The door jambs in this case were made in two pieces fitting on to each

[1] This curved wall rests on a rough limestone plinth which seems to have been originally intended to be invisible. Owing to the lowering of the pavement of the inner 'Corridor of the Stone Basin' this plinth came into view, and, as it presented an incongruous appearance, was, as Dr. Mackenzie observes, cut back to the same plane as the gypsum blocks and masked with a stucco coating which also extended over the original gypsum facing.

other and having the inner ledge continuous. A noteworthy feature about them was that they slightly projected beyond the face of the original jambs or *antae* of the Magazine. This phenomenon was, however, explained by the discovery of the remains of gypsum lining slabs which had originally been applied to the face of the *antae*, and the thickness of which corresponded to the slight projection of the inner door jambs beyond this line.

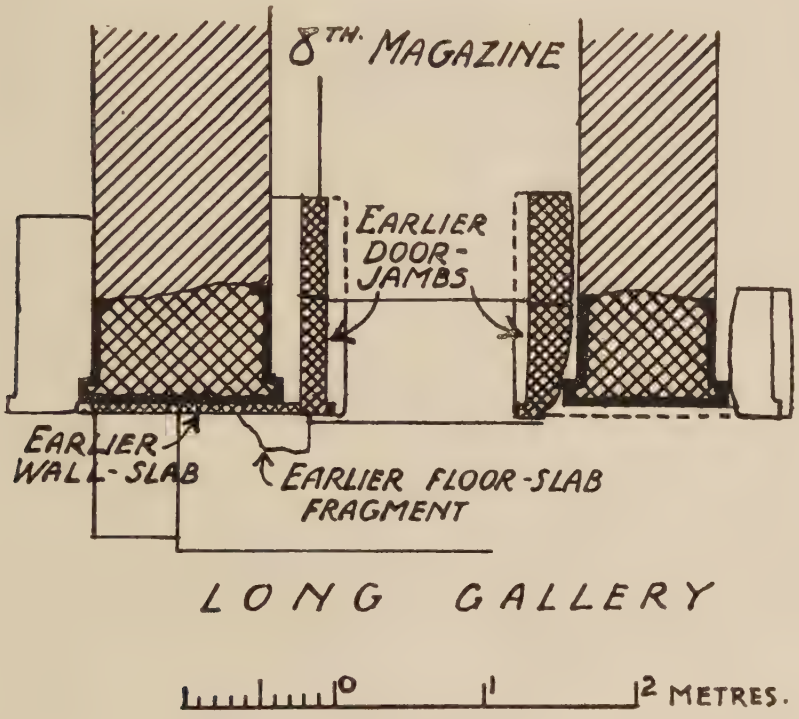


FIG. 11.—PLAN OF EARLIER DOORWAY OF EIGHTH MAGAZINE.

Traces of a similar modification of the original entrance were found in all the Magazines from the sixth to the thirteenth.

It will be seen that in their original shape these store chambers had been provided with massive *antae* having reveals which point to doorways of the full breadth of the Magazines. We do not here find the threshold ledge that characterises the later door jambs, and the whole framework within the reveals was probably of wood.

D

Next follows the period, illustrated by the present discoveries, when the door-openings were narrowed by the insertion of the new gypsum door-jambs. The dimensions in the various Magazines slightly vary, but in the Eighth the breadth of the doorway was now reduced to 1·15 metre in place of the original breadth of about 1·70 metre. The new doorways, of more elaborate construction and smaller dimensions, were obviously less well adapted for the introduction of large storage vessels such as the great clay *pithoi*, and point to the need of securing more valuable possessions. It was doubtless during this period that the Cists or 'Kaselles' within were largely used for the deposit of real treasure in precious metals, and may have contained the plate and ingots referred to in some of the clay archives. The simultaneous coating of the *antae* of the Magazines along the side of the Long Gallery with gypsum lining slabs also evidences a high level of material prosperity.

In the next period, which answers to the latest period of the existing Palace, these narrow door-openings were removed and the entrances to the Magazines restored to their full width. It would even appear that there were no doors during this period, since the sides of the entrances, where the door-posts should have been, were plastered over with painted stucco. This stucco shows the white ground and red dado bands characteristic of the latest decoration of this part of the Palace basement. It was doubtless at this time that the final change in the floor of the Magazines took place, the earlier Cists being either covered over with the new pavement as in the Eighth Magazine or, as was more usually the case, reduced to mere shallow recipients, probably intended to hold the oil that might escape from broken or overturned jars. This is *par excellence* the age of oil storage.

It must at the same time be observed that, apparently during the latter part of the period covered by this last phase, the entrances to some of the Magazines were again straitened, and that in a most effective manner. In the Fourth, Fifth, and Thirteenth Magazines a pier of gypsum or limestone with new door jambs attached was set against one or other of the entrance walls, the doorway being thus reduced to about half its original breadth. It is possible that in addition to the liquid contents other objects of value continued to be deposited in these Magazines.

Further remains brought out this season near the South end of the Long Gallery show that during what may be called the second period in the history of the West Magazines the avenue of approach was carefully

secured on this side. Traces of a cross-wall with a central doorway,[1] partly

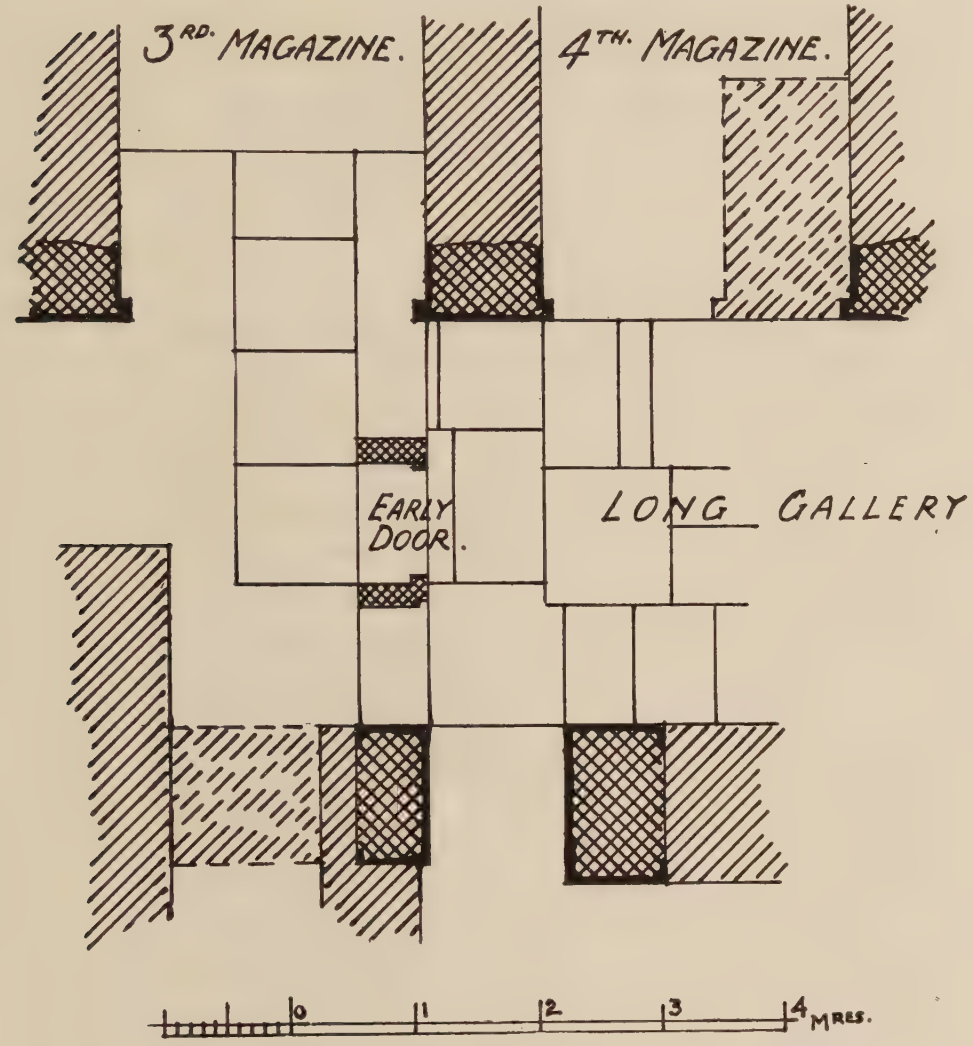


FIG. 12.—PLAN OF EARLY SOUTH ENTRANCE TO LONG GALLERY.

[1] The wall itself was 35 centimetres thick, and the gypsum door-jambs that appear in the middle of it were 98 centimetres apart. The door was controlled from the Southern side.

It will be seen that this barrier shut off the greater part of the Long Gallery and the Magazines from the Fourth onwards from the southernmost section of the Gallery and the three first Magazines. That the wall was later than the Magazines in their earliest form is shown by the fact that it was built over the Southern reveal of the *anta* between Magazines 3 and 4, against which it is set.

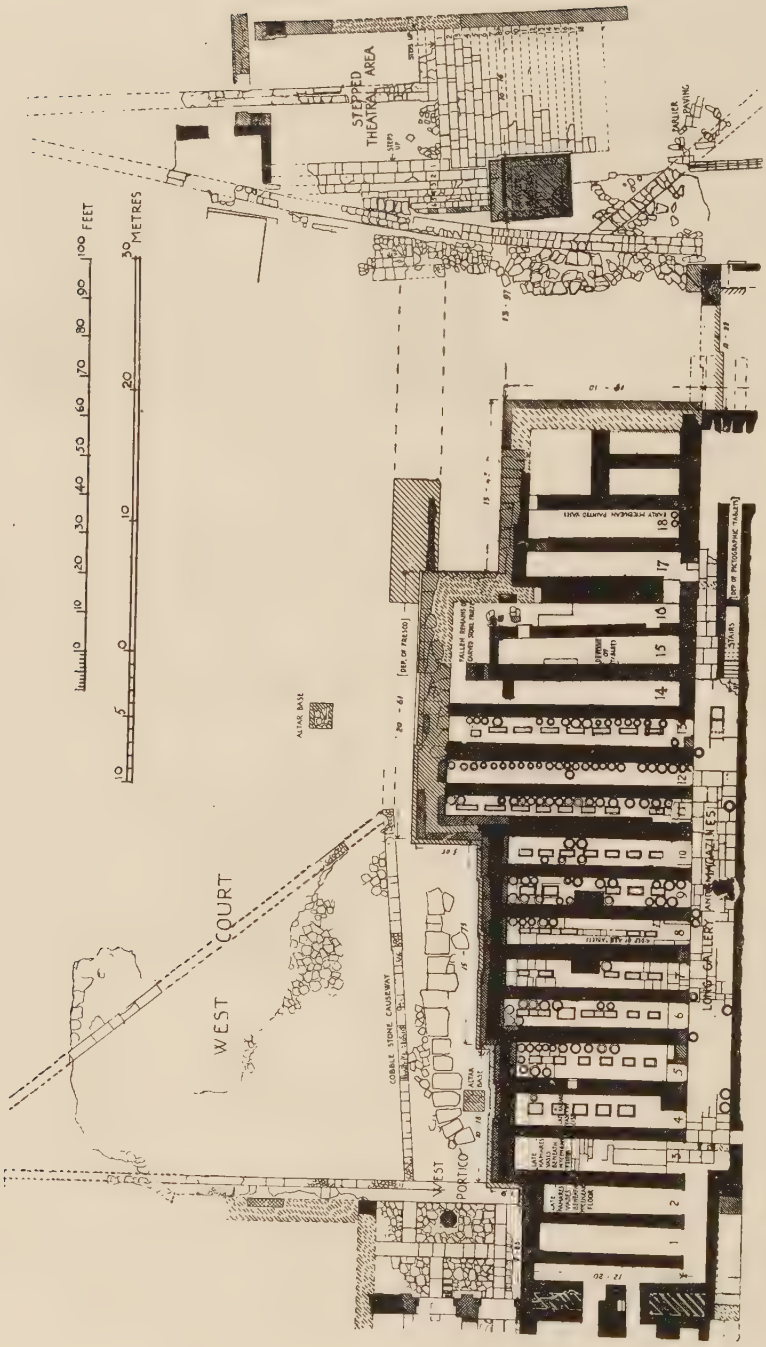


FIG. 13.—NORTH-WEST SECTION OF PALACE PLAN.

lost in the later pavement, were here brought to light, running across the Long Gallery from the gypsum pier that separates the Third and Fourth Magazines to that which lies immediately South of the entrance to the Corridor of the Granary Tablets. (See plan, Fig. 12.)

§ 8.—FRESCOES DERIVED FROM A NORTH-WEST HALL SHOWING PILLAR SHRINE.

A glance at this section of Palace plan (see Fig. 13) shows that the series of Magazines from the eleventh to the sixteenth inclusive are longer than the others, and that the façade wall accordingly juts out an additional five metres into the West Court along this section.

It further appears that the dividing walls between the Tenth and Eleventh, and, again, between the Sixteenth and Seventeenth, Magazines attain an exceptional thickness, evidently to support the outer walls of a large hall superposed on the area in question, the Eastern boundary line of which is supplied by the Northern section of the Long Gallery.

According to the above indications this North-West Hall would have formed an almost perfect square in its exterior measurements—namely, 21 metres North–South by 20 East–West. It is further observable that two of its inner supporting walls—that between the Twelfth and Thirteenth Magazine and that between the Fourteenth and Fifteenth—are somewhat thicker than the others, suggesting that pillars or columns ran along these lines, thus dividing the hall into three equal sections, like the 'Basilica' of the Royal Villa.[1]

A series of discoveries made during the excavations of 1901 within the North-Western angle of this area and just outside the adjoining part of the Palace wall had already led to the conclusion that some important upper structure once existed on this side.[2] Among these finds were part of a frieze, composed of a porphyry-like limestone, showing triglyph-like bands of spirals between half-rosettes and recalling that of the Pillar Shrine in the Miniature Fresco. There were also parts of wall-paintings executed on various scales which were evidently derived from the same Upper Hall. Among these may be mentioned the bust of a girl that has struck so many Parisian observers as a *type faubourien*, and male figures on a smaller scale, some of them holding vases in precious metals.

[1] *Report: Knossos*, 1903, Pl. I. [2] *Report: Knossos*, 1901, p. 54 *seqq.*

A kind of platform of massive blocks has been built against that part of the Palace wall which originally supported the North-West angle of the upper structure to which the above remains belonged. In my Report of the Excavations of 1901 [1] I was inclined to regard this platform as having principally served the purpose of a buttress. But the Northward extension of the platform has now gained a new significance from the fact that it points directly to the broad Southern entrance of the recently discovered Theatral Area, only some twenty metres off. It looks, rather, as if we had here the substructure of a ramp giving direct access to this stepped enclosure from the Upper Hall with which we are dealing.

A discovery made during the present season has now thrown a new light on the decoration and character of this North-West Hall.

The Cists or 'Kaselles' in the floor of the Thirteenth Magazine which underlay the central section of this area were found to contain fragments of exceptional interest. As in the generality of cases, the Cists of this Magazine had been partly filled up and reduced to less than half their original depth by means of new bottom slabs during the concluding period of the Palace. As first constructed, the Cists in this Magazine had a depth of 1·30 metre. The subsequent superficial receptacles were only 55 centimetres deep, and seem to have served as vats to contain the overflow of oil from the occasional breaking or leakage of the large store jars—such shallow receptacles being often provided in the oil stores of modern Greece.

On removing the bottom slabs of these later vats, the lower compartments were found filled with a mass of plaster and other *débris* evidently swept into these receptacles during some extensive repairs in this Palace area executed about the same time as the alteration in the Cists themselves. Amongst this rubble were quantities of fragments of painted stucco which may reasonably be supposed to have been derived from the Hall immediately above the Magazine.

Fragmentary as were most of these remains, they supplied some valuable indications as to the decoration of the North-West Hall during the flourishing period of the Later Palace, and thus supplemented the evidence afforded by the pieces of fresco already found on the Western border of this area.

One of our best workmen, a Moslem named Hassan, was much excited by the discovery in the second Cist of this Magazine of what he

supposed to be a portrait of the Devil. It proved to be a fresco fragment shewing part of the head of a swarthy bull with very woolly hair and a red-rimmed truculent eye. The horns were painted blue and the head was evidently that of a charging animal. The subject was further explained by the appearance, against the yellow background of the design, of straggling corkscrew locks evidently belonging to some cow-boy performer who had either been tossed by the bull or was performing some kind of acrobatic evolution similar to that of the bull-ring fresco found on the Eastern borders of the Olive Press area. We have here, then, a scene of the *taurokathapsia*. The drawing of the bull's head is spirited and about a quarter natural size.

Other fragments show parts of a crowd of men, only the heads and, at most, the busts being visible. Their eyes are indicated by small white marks, and their hair is curled above the top of the head and falls in long locks down the back. The background is formed of two curving bands of yellow and sky-blue. The summary method here adopted of indicating multitudes of men is identical with that of the miniature frescoes found in 1900, though the scale here is somewhat larger. Below the groups, moreover, are traces of a white band with horizontal lines which seems to answer to the walls seen in the parallel series. Here, too, we must recognise spectators looking on at sports or dances, perhaps of a religious nature, in the courts of a building.

Nor was the distinct religious note, supplied in the case of the miniature frescoes by the central Shrine, wanting among the present remains. The most remarkable of the fragments of wall painting found in these 'Kaselles' are of an architectural character, in some cases showing portions of a columnar sanctuary. A part of a triglyph band with red, black, and blue panels, and of a half rosette of the typical kind—white and yellow with red and black outlines—suggests a similar application to that of the pillar shrine of the miniature frescoes.

Several other fragments serve to make the religious parallelism still more definite. We see here parts of an extensive architectural composition with contiguous open chambers, divided by what appear to be wooden posts, and with entablatures above showing the round ends of beams and on top the usual 'horns of consecration.' In some cases there is seen below the openings of these structures a timber framework enclosing what is intended to copy variegated stone-work, or, more probably, the imitation

of such in painted plaster. Among the panels depicted, some with black, green, and white spots seem to be copied from slabs of porphyry or of Spartan basalt. (See Fig. 14.)

The section of building, in the lower part of which these panels

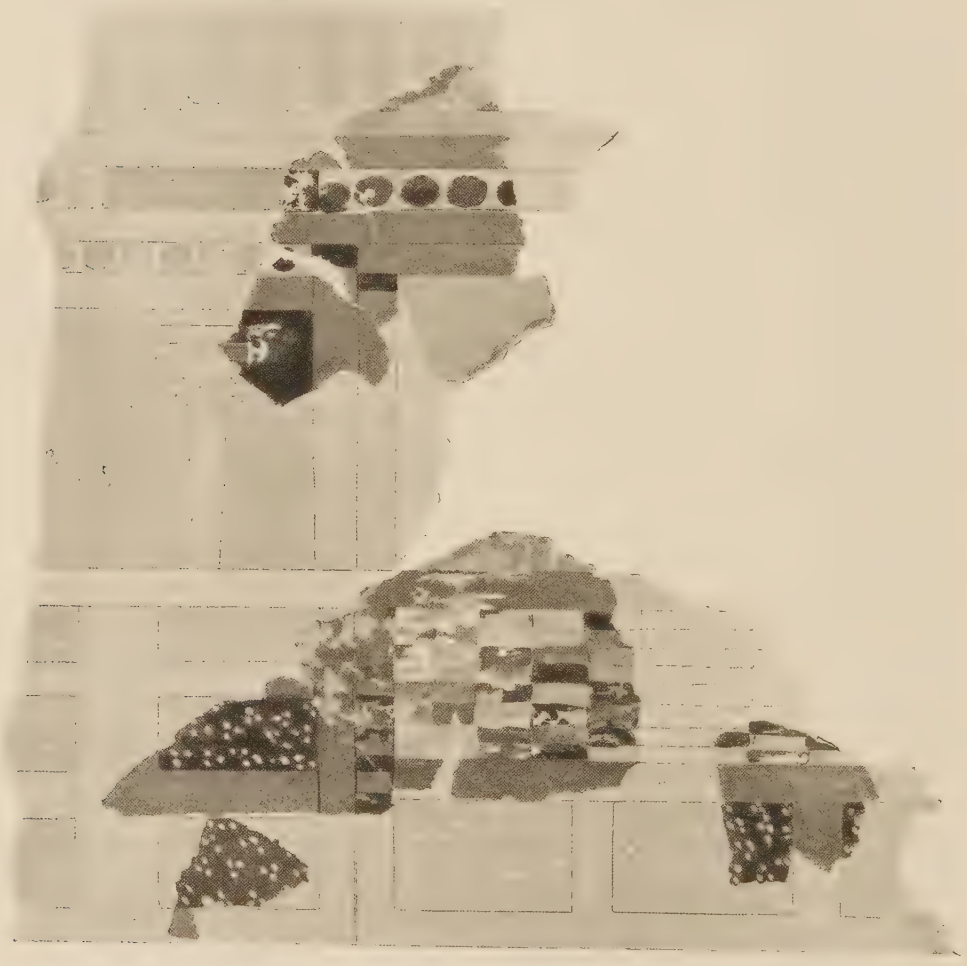


FIG. 14.—FRESCO SHOWING PART OF A SANCTUARY, FROM NORTH-WEST HALL.

appear, shows in an opening above, against a black ground, a part of a capital of a wooden column, painted orange, brown, and red, with a white object projecting from the top of its *echinus*. This curious feature receives

fuller illustration from the section reproduced in Pl. II. There are here seen three wooden columns of a similar type—characterised by two white excrescences, of the same kind as the preceding, on either side of the capital that has been preserved. The entablature, which was also doubtless of the same composition as that shown in Fig. 14, is here wanting; but on either side of each column—emphasising its sacred character—the usual horned cult object is set on the stylobate. Below is a frieze or border with rosettes of a decorative rather than purely architectural character.

The white objects that appear on either side of the capital have the appearance of being partly embedded in its substance. A comparison, moreover, of the various examples on these fragments leaves little doubt as to what they are intended to represent. They are, in fact, the fetish Double Axes of Minoan cult, stuck into the woodwork of the sacred pillars. On the Palaikastro 'larnax' we see the Double Axe planted on the top of a column,[1] while on the painted Sarcophagus of Hagia Triada the shafts of the twin Axes themselves take a pillar-like form. The combination of the Minoan fetish with the local cult of 'baetylic' pillars and pillar shrines is thus illustrated on all hands. The actual insertion, in the instance before us, of an axe blade in the shaft of the column recalls, moreover, a curious cult practice noted in the Cave Sanctuary of Dicta. In the inmost shrine, represented by the spacious vaults of the lower part of the Cavern, explored by Mr. Hogarth,[2] the sacred columns were supplied by the natural pillars of stalagmite, and in the chinks of these—sometimes entirely covered in the lapse of ages by the drop-stone film—had been stuck various small bronze implements and weapons, conspicuous among which were votive Double Axes.

The religious element here perceptible in the wall decoration of the North-West Hall is closely paralleled by that revealed in the Miniature Frescoes fallen from what seems to have been another important Hall immediately West of the Northern Entrance passage, and tends to bring this whole North-Western quarter of the Palace, like so much else of its Western wing, into a specially sacred connexion. The direct relation, of which the indications have been noted above, between the North-West Hall and the Theatral Area, enhances this impression. The more sacerdotal functions of the Minoan Priest-Kings seem to have found their field of activity on this side.

[1] *B.S.A.* viii (1901–2), p. 299, Pl. xviii.

[2] *B.S.A.* vi. p. 100.

The special sanctity of this quarter was already suggested by a series of discoveries—some of them illustrating the earliest period of the existing Palace. Among such may be enumerated the stone pillars with their constant repetition of the sacred Double Axe, the Temple Repositories with the Snake Goddess and her votaries, the lines of treasure Cists, the Room of the Stone Vases—many of them apparently intended for cult usages—the area containing the seals with the lion-guarded Mother Goddess, the neighbouring Throne Room itself with the painted griffins,—guardians, as we know from other sources, alike of the Goddess and of the fetish Axes—keeping watch and ward on either side of the Throne and of the inner doorway.

The religious character of the North-West Hall is further borne out by the discovery in this basement area, and also derived from the upper floor, of fragments of more than one vase in the 'Palace Style,' bearing representations of Double Axes.[1] Other similar pieces were found in the adjoining North-West Building,[2] which seems to have been a kind of dependency of this part of the Palace, and to have contained supplementary deposits of valuables belonging to the Sanctuary. Another significant fact is the appearance of an altar base in the West Court immediately opposite the Central Section of this North-West Hall.

§ 9.—Further Upper Halls above the West Magazines: The 'Megaron of the Spotted Bull.'

The traces of the existence of a North-West Hall above Magazines 11–16 are supplemented by indications presented by the neighbouring Magazines of at least two other upper *Megara* immediately South of this.

It will be seen from the plan (Fig. 13, above) that Magazines 6 to 10 inclusive make up together a square block, the sides of which in either direction are almost exactly sixteen and a half metres in length. The beginning and end of the front of this block, looking on the West Court, are marked off by two angles of the façade wall of the Palace on this side, and there can be little doubt that this quadrangular basement area originally supported a Hall or *Megaron* of somewhat smaller dimensions than

[1] One of these is given in *Knossos: Report*, 1901, p. 53. Other fragments from this area are given by Dr. Mackenzie, 'The Pottery of Knossos,' *J.H.S.* xxiii. p. 204. A miniature shrine is seen at the foot of one of these Axes.

[2] *Knossos: Report*, 1903, pp. 114, 115.

that immediately to the North of it. The substructures here, indeed, afford an interesting clue to the interior arrangement of this upper chamber, at least in the latest Palace period. In Magazines 7 and 9 limestone buttresses had been added to the original walls,[1] which are seen to occupy central and symmetric positions in relation to the area with which we are dealing. It is clear that these piers had supported two large central pillars or columns in the Hall above.

The *Kaselles* of Magazine No. 9, explored this season, have now afforded evidence as to the wall decoration of this Upper *Megaron*, very similar to that obtained in the case of the North-West Hall. In the lower part of these Cists were found quantities of the same rubble sweepings derived from some remodelling of the upper fabric, which probably took place at the time when the limestone piers were constructed. The amount of painted stucco here was not so large, but a fragment of wall painting was found representing a part of an animal, apparently a large bull, with brown spots on a white ground. Some foliate decoration, including an olive spray, also occurred here, and a small section of a chequer border resembling the frame of the panels with the scenes from the bull ring discovered in 1902. From the most important piece of fresco found here, it may be convenient to designate the Upper Hall, thus conjecturally recovered, as the 'Megaron of the Spotted Bull.'

Immediately South of this block is another smaller rectangular area occupied by Magazines 4, 5 and 6, which has also the appearance of having supported an upper chamber. It looks as if this series of Upper Halls, increasing in their succession Northwards, had all opened on some upper Corridor answering to the Long Gallery below.

§ 10.—MINOAN PAVED WAY, WEST OF THE THEATRAL AREA.

It will be remembered that the Theatral Area brought to light in 1903 at the North-West angle of the Palace was approached from the West by a paved Causeway which traversed its quadrangular floor, dividing it into two equal parts, and stopped at the foot of its Eastern flight of steps. Another slightly narrower Causeway of the same kind, ascending gradually from the North-West, cut the South-West corner of the Theatral Area and, passing

[1] See *Knossos: Report*, 1903, p. 29.

FIG. 15.—SECTION OF MINOAN PAVED WAY LOOKING TOWARDS THEATRAL AREA.

above the Southern tier of steps, bifurcated into two branches, one pointing towards the Northern entrance of the Palace, the other to the Pillar House somewhat North of it. (See Plan, Fig. 13).

Both of these Causeways broke off a little to the West of the Theatral Area, and, though considerable excavations were made in the space immediately beyond, later constructions had here, for a space of over 20 metres, destroyed all traces of their continuation.

It was evident, however, that the two Causeways must originally have converged at a point some 24 metres distant from the places where they break off. To discover this meeting-point and, if possible, to trace the further continuation of the united line of way was one of the tasks of the present season.

It was reasonably assumed that, the Causeway bisecting the Theatral Area being the broader and therefore the more important of the two, their joint continuation would be found to maintain the direction—almost due West—in which it pointed, the narrower Causeway being merely a divergent branch. A calculation on this basis made it probable that the meeting point of the two lines would take place about 38 metres due West of the foot of the Eastern steps of the Theatral Area which formed the terminus of the larger Causeway.

A carefully measured test pit running from East to West was accordingly sunk at this point. The surface deposit here proved to be Late Roman. Below this was a floor of limestone paving, between 20 and 40 centimetres beneath the surface, with the bases of three plain and very bulging *pithoi* in a row. Finally, the pavement of the Minoan Roadway of which we were in search was struck at a depth of 2·10 metres. It appeared that at this point the convergence of the two lines had already taken place.

From this point the Causeway was traced without a break for a distance of 40 metres, continuing the same Westerly course as that followed by the section that bisects the Theatral Area (Fig. 15). The pavement was brought out for the most part in a well-preserved condition, though here and there the slabs had been crushed and broken up. The stone Causeway was about 1·40 metre wide along this section—divided as before into two rows of slabs, each 70 centimetres wide, set lengthwise (Fig. 16). The thickness of the flags was about 12 centimetres.

This slabbed path, however, was found to be only the central part of

the roadway itself. On either side of it there came to light a further strip consisting of a compact layer formed of a mixture of pebbles, clay, and pounded potsherds with a hard, rammed surface—a kind of pavement also used for Minoan house floors. This tough layer extended about 1·10 metre on either side of the paving, giving the roadway a total breadth of 3·60 metres.

Sections cut in the course of the roadway showed that its central paving rested on a compact layer identical with the hard stratum already referred to as stretching on either side of it. Beneath this whole layer again, including the two 'wings' of the road, was a foundation of rough stones 20 to 25 centimetres in thickness. For the reception of this bedding a regular cutting the width of the roadway above had been first made, with slightly inward-sloping sides, in the natural surface of the

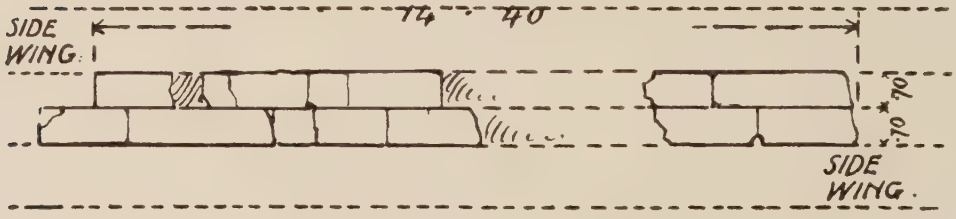


Fig. 16.—Plan of part of Paving of Minoan Way.

ground. The section thus presented is shown in Fig. 18, and it may be safely said that we have here the first European example of road-making on scientific principles.

The pottery of this bedding was of a mixed character, including Neolithic and 'Early Minoan' fragments, and, together with these, others with a lustrous black glaze slip, which in Dr. Mackenzie's opinion may well have belonged to the late Polychrome Period, though in the section specially examined no actual polychrome sherds occurred. The cutting itself had been made in an Early Minoan deposit.

Here and there in the course of the roadway the original fine limestone paving slabs had been broken away in ancient times, and their place supplied by stamped material like that described, or by smaller ironstone slabs. These changes clearly mark an age of decadence.

At 40 metres' distance from the point where the course of the roadway was recovered, the pavement was broken off for a distance of 23 metres, probably having been used for later constructions. The stamped earth borders, however, continued to be intermittently traceable, and after the interval above noted the pavement itself reappeared and was visible for another 14·10 metres—representing a total course of about 118 metres.

The slight downward inclination of the roadway already perceptible from its first start at the foot of the steps of the 'Theatral Area' was progressively continued to a point about 100 metres from the steps. At this point the bottom of the slight valley had been reached and the gradual ascent of the hillside beyond begins. The average fall is about 1 in 18 and the average rise from this point about 1 in 19. A slight depression is visible in the present surface of the ground, but it will be seen that at the time when the road was made the inclination was more considerable.

At the 118th metre a short interruption occurs in the visible traces of the Minoan paved way due to the preservation of a section of a Roman road running at a higher level. (See Fig. 17.) Beyond this interval of 9·20 metres, however, the Minoan pavement reappears at a depth of 3·30 metres. The further section of the road here uncovered extends West for another 42·70 metres with a slight continued rise. The pavement here visible is mostly later repair of the S. section of the road the N. section of which is here still uncovered. The materials here are of a miscellaneous character, and in one place a part of a Minoan drain had been worked in apparently to serve as mere pavement.

On the side of the hill above the modern road to Candia, about 60 metres beyond the end of this latter section, a test-pit dug in a line representing its exact prolongation brought to light similar paving.[1] We have thus the evidence of the existence of the Minoan Roadway for a total course of over 230 metres due West from the foot of the Theatral steps.

Whither did it lead? That an important quarter of the City existed on this side is sufficiently clear from the considerable remains of houses brought to light by numerous test-pits in this region. The cutting made

[1] The depth of this paving was 4·55 from the surface. Owing to the rise of the hill, however, it was at a higher level than the last part of the paving of the preceding section.

FIG. 17.—VIEW LOOKING WEST SHOWING MINOAN WAY AND SECTION OF ROMAN ROAD ABOVE.

in order to uncover the roadway itself showed traces of some of these aligned along its course as well as of a more important building to be described below. That it was a means of communication with this quarter of the City and with certain actual dependencies of the Palace is self-evident. But the careful planning of the roadway in conformity with the general orientation of the Palace lines and abutting at right-angles on the Theatral Area tends to show that it was principally planned as an avenue of approach to some monumental structure on the opposite hillside.

Further exploration of its traces in that direction is extremely desirable.

The overlying strata, removed in the course of bringing into view the successive sections of the Minoan Way, presented a very different character from those that covered the greater part of the Palace area. In that area we are confronted with the curious phenomenon that in the superficial earth, above the actual remains of the building, hardly a trace occurs of later occupation. Even the potsherds found are almost exclusively Minoan. By Greek and Roman alike this field of ruins had been left severely alone, and it seems to have been only at a time when the earthy deposit above had attained something like its present thickness that the area was again partially used for cultivation. It almost looks as if some surviving tradition of the religious aspect of the Minoan building in its function of Sanctuary as well as Palace may have served to protect the site. It may well, indeed, have been included in some later *temenos* like that of the Grove and Temple of Rhea.

It was only sporadically, towards the North-East, as in the case of the later kiln, and beyond the Northern entrance near the Pillar House where there was a 'Geometrical' well, that later remains began to appear. From about this point a zone can be traced, running Westward and including the greater part of the Theatral Area, where Geometrical, Classical Greek, and Roman remains occur in normal proportions. The Southern boundary of this zone, which skirts the North-West building, can be made out almost to a few feet, and the course of the Minoan paved way ran well within it.

One result of these altered conditions of excavation was the necessity —which in the Palace area proper had not presented itself—of constantly removing later structures, though these proved to be of no importance in themselves.

The earliest of these post-Minoan remains—the Greek, namely, of the

Geometrical period—often went down to within a few centimetres of the paving of the road itself. A very interesting result brought out by the occurrence of these Geometrical remains was that during the period represented by them the roadway was no longer in use. This is neatly illustrated by the fact that at a point about 20 metres West of the first test-pit, showing the beginning of the newly discovered section of the road, the pavement had been cut through by a well of the Geometrical Period. It appears that the road—which, though in places patched up in an inferior style, seems to have been at least kept open through the most decadent Minoan Age—had by this time been covered over and completely forgotten. This is one of the many indications of the real break in historic continuity involved by the coming in of the bearers of this Geometrical culture.

No trace of any roadway of Hellenic construction, either early or late, was encountered on the line of the Minoan Way. On the other hand, at about the 118th metre of its Westward course, were found the well-preserved remains, referred to above, of a paved Roman road running in almost the same direction. The identity in direction did not, however, in this case imply any real continuity of tradition, since the Roman paving was separated from the Minoan by a gradually formed deposit somewhat over 2 metres in thickness.

The historic coincidence itself, as well as the contrasts offered by it, were, however, of sufficient interest to induce us to preserve the Roman pavement for a length of $8\frac{1}{2}$ metres. The appearance presented by the two pavements is shown in Fig. 17, and a diagrammatic view of the Section appears in Fig. 18. The Roman pavement lay at a depth of 2 metres from the surface. In contrast with the well masoned slabs of the Minoan paving, with the solid bedding below, this was composed of mere cobbles set on the surface of the ground. The Northern boundary of the Roman road was formed by a wall going down to the level of the paving, the angle between the base of the wall and the road-level being filled with cement, so as to preserve the foundations from damp. On the South side of the roadway run three conduits or water-pipes. Two of these, formed of a kind of cement mixed with potsherds, are square in section and laid on a mortar bedding. The other is round, and consists of sections of terra-cotta piping fitted into one another, and with their necks pointing East, showing that the flow of water was in this direction. These water-

pipes indicate a source of supply on the hillside above, more or less corresponding with a still existing fountain on the line of the Venetian and later Turkish aqueduct, that still supplies Candia. The water of this aqueduct is brought from what is at present far and away the best and most copious spring of water in this neighbourhood, rising from an Eastern spur of Mount Juktas. It seems certain that the Roman water

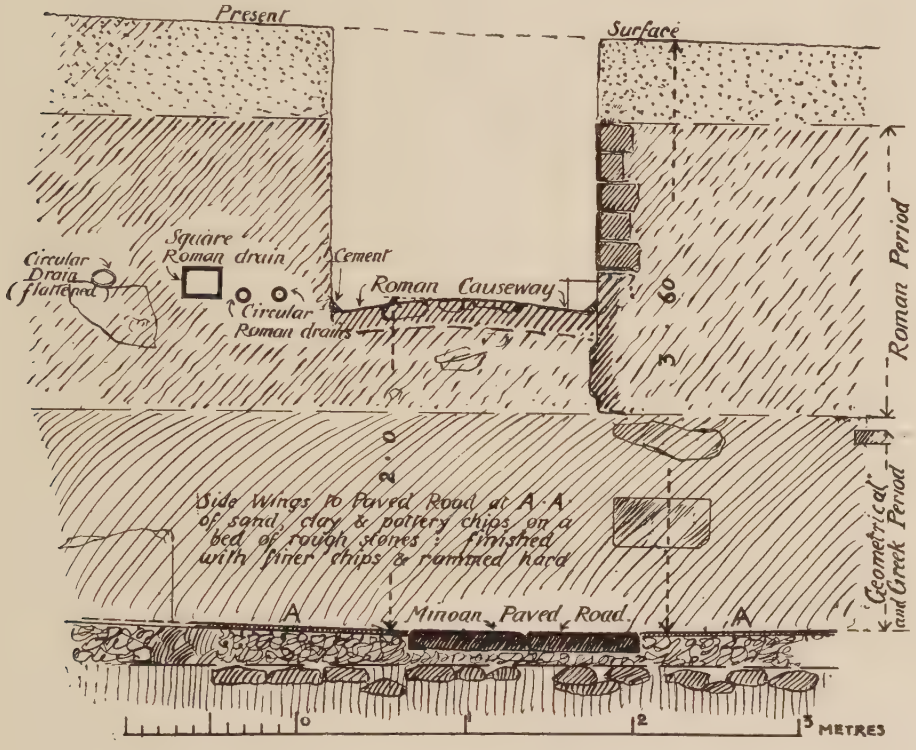


FIG. 18.—DIAGRAMMATIC CROSS SECTION.

supply was derived from the same quarter, and it is possible, considering the great hydraulic capacity shown by the Minoan architects, that water was conveyed to the Palace from this source. If this could be ascertained it would solve many difficulties as to the water-supply of the Knossian Palace.

The water conduits and shafts in the Palace, of which the function

can be ascertained, seem rather to have served the purpose of taking off the rain-water and flushing the drains. The wells found on the East slope belong to an earlier period, and there are none of the great bottle-shaped cisterns such as occur in the Palace at Phaestos. On the other hand, the water of the stream that runs along the valley below is, at present at least, too impregnated with decayed gypsum rock to be good for drinking. That a conduit existed, which brought down fresh water from the hill to the West, must almost be assumed, and the marvellously constructed sections of terra-cotta piping, found North of the Olive Press area, as well as another pipe of simpler construction near the Northern entrance, may be reasonably connected with the supply of spring water through some high-lying conduit.

§ 11.—Palace Magazines near the Minoan Paved Way with Stores and Archives.

One object sought by the thorough investigation of the course of the Minoan paved way was the possible clue it might give to the position of important buildings, perhaps even of actual dependencies of the Palace. This was especially the case in the region immediately West of the Theatral Area.

The length of the cutting, and the amount of later structures and deposit to be removed above the level of the road-paving themselves, involved too serious an expenditure of labour to allow of much to be done during the present season in the way of side exploration. At one spot, however, just North of the point where the road attains its maximum of descent, an almost imperceptible rise in the surface of the ground suggested the possible existence of some important structure below.

A test-pit was accordingly sunk at this point, but it was not till a depth of 4·50 metres had been reached—lower, that is, by about half a metre than the neighbouring part of the road—that any Minoan deposit was reached. This deposit was at once distinguished from the duller and darker aspect of the over-lying Greek and Roman strata by its tawny and almost golden hue.

Part of an interior wall of a building was struck in this stratum, showing a mixture of limestone and gypsum blocks—a very usual feature of

Minoan masonry. As the top of the wall was already below the level of the neighbouring road pavement, it was evident that we had to do with basements.

These remains tended to confirm the view that the slight swelling of the surface of the ground some sixteen feet above might eventually find its explanation in the existence of a considerable building of Minoan date. The full importance of the discovery, however, was only ascertained on reaching the deposit immediately above the floor level. This deposit, which was largely mixed with carbonised fragments, proved to contain inscribed clay tablets and seal impressions, evidently belonging to an important hoard or series of hoards.

In view of this discovery, it became obvious that the whole surrounding area must be fully explored to the same level. The great depth at which these Minoan structures lay made the task thus set before us a heavy one, and considering the lateness of the season it was evident that in any case only a section of the area could be completely dug out. In order to expedite matters, it was therefore decided to resort to a method of excavation which had already been found effective, in the cutting for the roadway, though on the Palace site proper it had not been feasible.

In that region, as already noted, true Minoan remains were found from the surface downwards, a circumstance which entailed comparatively slow and tentative excavation. In the present area, however, where later and almost wholly unimportant deposit extended for so many metres depth, it was found convenient to work by a system of wager down at least to the level where more important finds might be expected. According to this method the area to be excavated was partitioned out into squares, in the present case of four metres, an equal number of men—not less than three—being assigned to each lot. A prize was given to the group of diggers who first reached the level, here four metres down, to which this competitive kind of excavation might be considered safe. The work of clearing the ground was further accelerated by contracting with parties of villagers to remove the earth thrown up in the native manner by putting it into sacks, which were carried off by donkeys to the nearest dumping ground.

This method of excavation marvellously expedited matters, two or three times the amount of earth being excavated and removed in a given time than would have been possible under other conditions.

In this way it was possible before the close of the season to clear an

area about a dozen metres square to a depth of four metres, and over part of this area to explore the Minoan stratum immediately underlying this level. The basement structures were now found to extend on every side

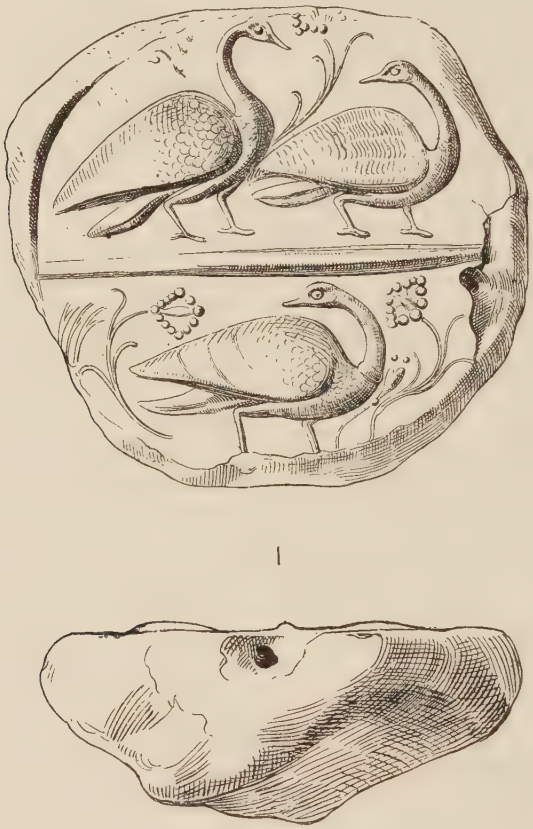


FIG. 19.—CLAY SEALING SHOWING WATER FOWL.

from the foot of the first wall discovered, and further remains of the deposit of inscribed tablets were at the same time brought to light. From the position of these at somewhat variant levels, in some cases above fallen cement flooring, it was clear that they had been originally stored on the floor above the basement, as seems to have been often the case in the Palace. A reason for this may be sought in the fact that the inscribed clay tablets were merely

sun-dried or subjected to a very slight degree of heat in the first instance, so that they were very liable to deterioration by damp. The ultimate preservation of the clay archives was undoubtedly due to the destruction of the building itself by fire. In the present case—like those, fallen from an upper storey, found in the East-West Corridor of the Palace—the tablets were exceptionally charred, and some of them had been reduced to a cindery state, indicative of a very intense conflagration.

Together with the inscribed tablets were found, as in other cases, clay sealings which had either secured the chests in which the tablets were stored, or had been attached to documents of more perishable materials, such as parchment. Among the sealings were impressions of an exceptionally large signet of the lentoid kind, showing water-fowl and flowering plants executed in the finest style of the Later Palace (Fig. 19). Another

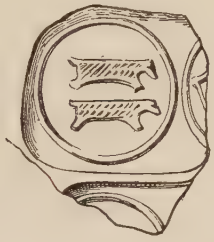


FIG. 20.—CLAY SEALING SHOWING SKINS OF ANIMALS.

much smaller seal (Fig. 20) presents a more enigmatic device. It may be taken to represent two skins of animals seen sideways.

Eighty inscribed tablets, including important fragments, were found in the area excavated. These tablets, with the exception of a few stragglers, lay within the opening of what seems to have been a basement Magazine, into which the wooden chests containing them had sunk when the floor above collapsed. Of these about fifty referred to chariots. Here, however, as in the case of a parallel series of tablets found in the Northern entrance passage, no complete chariot was represented in connexion with the inscription, the frames, with or without the poles and yokes, appearing on one set (See Fig. 21), and the wheels by themselves on another. The large expenditure on the last item entailed by the character of the country may be gathered from the fact that one tablet

concerns a total amount of 478 wheels. It must be observed, however, that some of the tablets refer to as many as 80 or 90 chariot frames. In the formulas preceding these representations the throne-and-sceptre sign plays an important part.

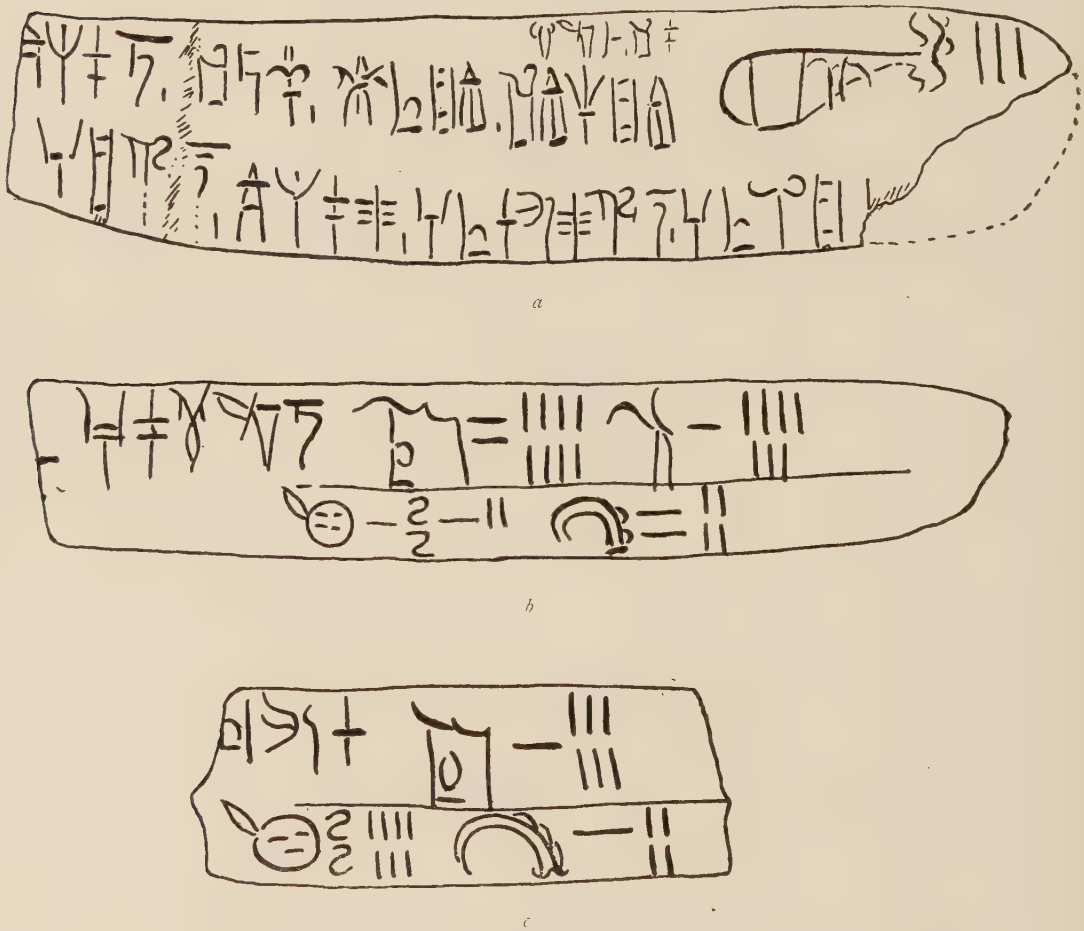


FIG. 21 *a*, *b*, *c*.—INSCRIBED TABLETS WITH FRAME OF CHARIOT (*a*) AND HORNS OF CRETAN WILD GOATS (*b*, *c*).

The pictorial designs on some of the tablets remain unexplained. One apparently relates to spears or javelins. Still more interesting are a series of tablets (Fig. 21, *b* and *c*) showing two curved objects, the explanation of

which can present no difficulty to any one familiar with Minoan designs. We have here represented the long curving horns of the Cretan Agrimi or Wild-Goat, the characteristic 'rings' of the horns being indicated by small curved lines near the base of each, a device for which an exact parallel may be found on contemporary figures of the same animal on some contemporary gems.

To what purpose were these pairs of horns applied? There can be little doubt that we have here the raw material for horn bows, such as that of Menelaos.[1] It is true that the more usual form of the bow in Minoan Crete, to judge from the small steatite relief found in the North-East Palace quarter[2] and from various designs on gems, was of the simpler African and usual European type, indicating a wooden material. But the horn or composite type, so distinctive of Asia, can claim a very high antiquity in the island, since a weapon of this form appears in the hands of a hunter pursuing a Wild Goat on a seal belonging to the beginning of the Middle Minoan Period, from Central Crete. At a later date the use of the horn bow in the island is well authenticated by the open-work bronze relief from Crete of very early Greek work, first described by Milchhoefer,[3] showing a bowman grasping the arm of a youth who holds an Agrimi on his shoulders. Certainly, for such hunting, this form of bow had a peculiar appropriateness.

That the Agrimi horns on these tablets formed the raw material for bows receives striking confirmation from two associated discoveries. With the above tablets was found the latter part of one referring to a large amount of arrows. The subject of this clay document was made clear by the repetition of a pictographic figure of an arrow. The tablets contained a record of two large lots of arrows, one 6010 in number, the other 2630, or 8640 in all. The first part of this tablet remains, unfortunately, to seek.

But what adds an extraordinary interest to the occurrence of this inscription is the discovery in its immediate neighbourhood of the remains of two actual depôts of arrows, at a distance of about 3 metres from one another.

The depôts had in each case been contained in wooden boxes with bronze loop handles, and together with the charred fragments of

[1] *Iliad* iv. 105, *seqq.* [2] *Knossos: Report*, 1901, p. 44, Fig. 13 (*B.S.A.* vii.).
[3] *Annali*, 1880, p. 213, *seqq.* *Tav. d'Agg.* T.: *Anfänge der Kunst*, p. 168, 169, Fig. 65.

these were found the clay seals with which their string binding had been secured. These sealings were three-sided, the string passing through their major axis. Both chests had been sealed in an identical manner, and together afforded a more perfect illustration of the Minoan method of controlling and safeguarding deposits of valuables than had as yet been supplied by similar remains from Knossos or elsewhere. In

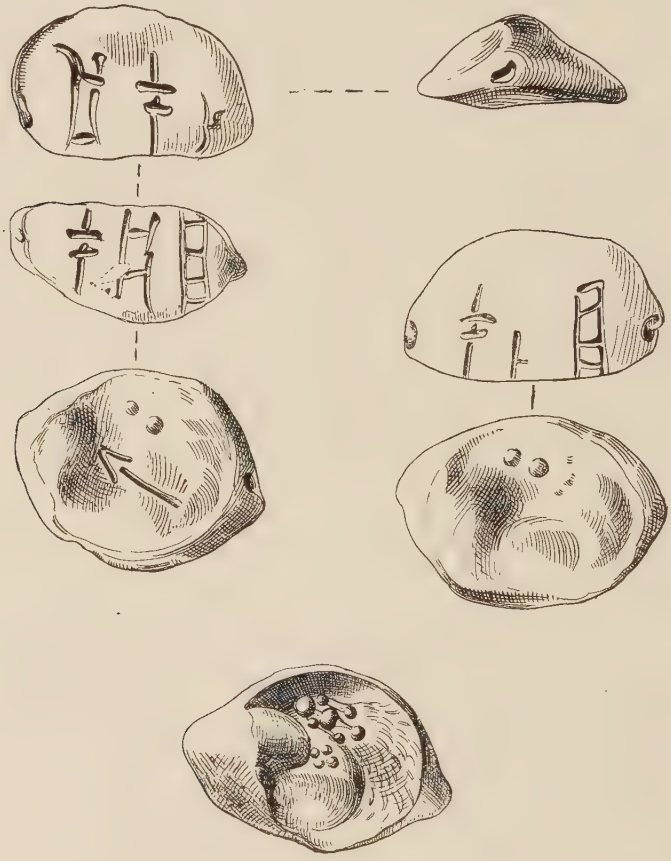


FIG. 22.—CLAY SEALINGS WITH COUNTERMARKS AND SIGNATURES FROM CHESTS CONTAINING ARROWS.

no other case had such chests and sealings been found in direct association with the objects that they secured and the documents relating to them.

The sealings thus duplicated were of three types, which may be described as A, B and C (See Fig. 22). The signet used had for its

device a couchant lion, in a careless style of engraving, the impression of which, owing to the subsequent countermarking and countersigning of the clay while it was still wet, was much effaced. In type C, however, where it stands alone on the sealing, some of the details are visible.

In A 1 we see this device cancelled by the arrow sign, which is a somewhat simplified form of that seen on the tablet referring to these deposits. A 2 and 3 show the method of countersigning,—the first characters on A 1 being the significant throne-and-sceptre, here shown in a cursory manner. In B 1 the lion device can also be traced, but the arrow sign is wanting. B 2 shows the only side of this sealing with inscribed characters; the remaining side is plain. In type C, as already noticed, both of the smaller sides (where the clay nodule was pinched in) are plain, the lion device alone appearing on the principal face, without the countermark.

Embedded in the *débris* of the chests, once so elaborately sealed and registered, were the carbonised remains of the shafts and, partly attaching to them, the bronze heads of hundreds of arrows. The arrowheads were of small size and of two principal types, namely with and without a stem. Together with the bronze arrowheads which formed the mass of the two deposits were three of bone and one broken specimen of flint, all these of the stemless kind. The types of the bronze arrowheads are identical with those of the arrowheads found by Tsountas in a chamber-tomb of the Lower Town of Mycenae, where they had been laid in two bundles of ten each.[1] In spite of the diminutive size of those from the present deposits, there does not seem to be sufficient reason for seeing in them objects of votive usage. Strengthened as their thin blades would have been by the pointed ends of the wooden shafts in which they were hafted, they may have been quite effective for shooting small animals, including the Cretan wild-goats. We must in fact recognise in them arrows of the chase.

The depôts of arrows lay within a narrow Corridor running from South to North, into which opened two Magazines of somewhat unequal width. The inscriptions lay within the opening of the first of these Magazines. The above mentioned Corridor communicates at its Southern end with another narrow passage, and to the North leads to a larger Chamber or Magazine, the limits of which are as yet imperfectly

[1] Tsountas and Manatt, *The Mycenaean Age*, p. 206, Figs. 92, 93.

ascertained. Throughout this area a good deal of exceptionally fine cement flooring[1] belonging to one or more upper chambers was visible, some of the inscribed tablets being above the level of this. The floor level of the basement Corridors and Magazines lay at 5·45 metres below the surface, and the walls had been in most cases levelled away to about half a metre from this, the North wall of the Second Magazine alone rising to a height of 1·20 metre. A further indication of date was supplied by the fact that immediately West of the larger Magazine were found fragments of painted pottery, including the frequent grass design, characteristic of the latest Palace Period (Late Minoan II.).

The extent and general arrangement of the building to which these structures belong can only be determined by further excavation on a serious scale. In the meantime, we must conclude from the character of the inscriptions, and the deposit of arrows with their official sealings, that we have to do with an important dependency of the Palace. It seems possible that we may be able to locate here the Royal Armoury and Stables.

ARTHUR J. EVANS.

[1] Dr. Mackenzie notes of this cement flooring that its foundation was of clay and sand. Above this was laid a layer of grey tough earth such as is now used in Crete for roofs. Then came a layer of potter's red earth, over which was laid the floor layer of fine white 'stucco' cement, impregnated with very small river pebbles, and smoothed away to a fine surface.

TEAMS OF BALL-PLAYERS AT SPARTA.

A SERIES of inscriptions, most of which are unfortunately in a very fragmentary condition, records the victories won by teams of Spartan ball-players. As two of these have not yet been published while the others have never been grouped together, my present object is to collect the texts in question, restoring them as far as possible, and to add a short statement of the main facts which we can gather from them regarding the contest referred to.

The inscriptions are as follows:

1. Martha, *Bull. Corr. Hell.* i. p. 379, No. 2. In the Sparta Museum (No. 400). On a greyish marble stele broken at the left top corner and below. Height ·52 m.; breadth ·45 m.; thickness ·07 m.

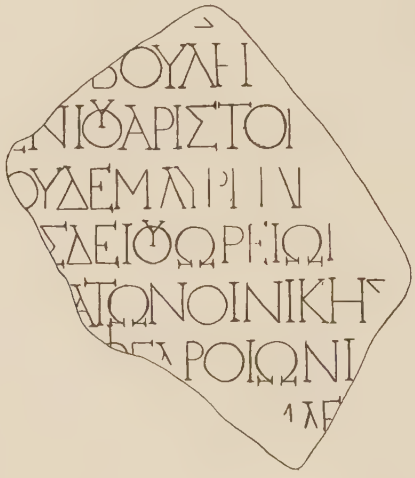
[Ἀγ]*αθῇ τύχῃ.* | Ἐπὶ *πατρονόμου Λυσίπ*|*που τοῦ Δαμαινέτου*| *φιλοκαί-*
σαρος καὶ φιλοπά||*τριδος, βιδέου δὲ Πεδουκαί*|*ου Ἐπαφροδείτου,*
ἀριστίν|*δου δὲ καὶ διαβέτεος αὐτε*|*παγγέλτου Δαμαινέτου*| *τοῦ Ἀριστο-*
κράτους· σφαι||*ρεῖς νεοπολιτῶν οἱ νικά*|*σαντες τὰς ὠβὰς ἀνέφε*|*δροι,*
ὧν πρέσβυς | Γαληνὸς Σπένδ(ων<ς>ος) | (Σπ) - - - - -

Forms of letters ΑΕΘΜΠΦΩ, with marked *apices*.

Martha, who publishes the inscription without commentary, reads *ὥρας* for *ὠβάς* in l. 11; in l. 13 he has Σπένδω[νος], while my copy shows ΣΠΕΝΔ⌒ΝΙΣ⌒⁻; in l. 14, where he has marked nothing, I see traces of two letters ⊂Τ.

The inscription happily preserves in full the introductory formula, and thus gives us the key to the following fragments.

2. In the Sparta Museum (No. 781). On a fragment of a massive stele of white marble with black veins. Height ·5 m.; breadth ·42 m.; thickness ·14 m.; height of letters ·04 m.



Scale 1 : 8.

- - - *βουλῆ*[ς - - - | - *αἰ*](*ω*)*νίου ἀριστο*(*π*)[*ολιτευτοῦ*, |*βιδέ*]*ου* (*δ*)*ὲ* **M**(*άρκου*) (**A**)*ὐ*(*ρη*)*λί*[*ου* - - - *δια*|*βέτεο*]ς *δὲ* *Ἰου*(*λίου*) *Ὡρείων*[*ος*· *σφαιρεῖς*|| - - (*α*)*τῶν οἱ νικήσ*[*αντες* | *τὰς ὠβὰς ἀνέ*](*φεδ*)*ροι, ὧν* (*π*)[*ρέσβυς*]| - - -

The position of the margin of the stone cannot be exactly determined, but the length of the line (approximately 25 letters) is fixed by the certain restoration *νικήσ*[*αντες τὰς ὠβὰς ἀνέφεδ*]*ροι*. This proves that no patronymic follows the name of Julius Orion, and also affords a strong argument in favour of the restoration [*αἰω*]*νίου ἀριστο*[*πολιτευτοῦ*] (l. 2), since the only alternative is to regard *Ἀριστο* - - as the beginning of a proper name and there is no *Ἀριστο-* name of the required length. *Cf.* No. **3** below. The title is also found in *C.I.G.* 1349, 1375, and indicates that the holder enjoyed a lifelong tenure of the honours and privileges attached to the *ἀριστοπολιτεία* (*cf. C.I.G.* 1352, Le Bas-Foucart 175, *λαβόντα τὰς τῆς ἀριστοπολιτείας τιμάς*), which was under ordinary circumstances granted for a limited period.

In l. 1 we may probably restore [*γραμματέως* (*τῆς*)] *βουλῆ*[ς], a title which occurs in *C.I.G.* 1241 Col. I, 1246, 1249 Col. III. (?), 1253,

1259, 1345. As this office can hardly have been held by the eponymous patronomus, we must suppose that the latter was first mentioned, and afterwards the Secretary of Council and *αἰώνιος ἀριστοπολιτευτής*, who may have undertaken the erection of this monument (*cf.* No. **9** below): the fine slab of marble on which the inscription is engraved and the monumental character of the letters contrast with those of No. **1** and confirm the supposition that the cost was defrayed by some wealthy member of the obe.

3. *C.I.G.* 1432. *'Misithris s. Novae Spartae prope Castellum': ex schedis Fourmonti.*

- - - ΕΙΣΙΟΥ - -
- - ΔΙΑΒΕΤΕ - - -
- ΝΙΟΥΑΡΙΣ - - - -
- - ΣΦΛΙΡΕΙΣΚ - -
- - ΝΕΙΚΑΣΛΛ - - -
- - ΦΕΙΒΟΙ - - - -
- - ϽΣΛΤ - - - -

Boeckh recognized *σφαιρεῖς* (l. 4) and *νεικάσαν[τες]* (l. 5), and proposed *διαβέτ[ης]* in l. 2 and *[ἔ]φηβοι*, though doubtfully, in l. 6. We need have no hesitation in restoring in this last instance *ἀνέ]φε(δρ)οι*: the confusion between Β and Ρ is easily accounted for, and that it is possible to mistake Δ for Ι is shown by the fact that my first copy of No. **2** l. 6 showed *ἀνέ](φε)ιροι*. The inscription may, then, be written

βιδέου δὲ Ἀφροδ]εισίου [τοῦ - - - -], διαβέτε[ος δὲ - - - αἰω]νίου ἀρισ-[τοπολιτευτοῦ·] σφ(α)ιρεῖς Κ[ονοουρέων οἱ] νεικάσ(αν)[τες τὰς ὠβὰς ἀνέ]φε(δρ)οι, [ὧν πρέσβυς - - -]ος (Ἀ)τ - - -

As in the last inscription, the position of the margin is not determinable, but the length of the line (about 21 letters) is fixed by the phrase *οἱ νεικάσαν[τες τὰς ὠβὰς ἀνέ]φεδροι*. For the restoration *αἰω]νίου ἀρισ[το-πολιτευτοῦ]* see note on No. **2**: it gives a line of 18 letters, but this causes no difficulty, for the word may well have been written *ἀριστοπολειτευτοῦ* and there may have been a mark of punctuation between it and *σφαιρεῖς*, as in Nos. **5** and **8**. The restoration Κ[*ονοουρέων*], *i.e.* Κ[*υνοσουρέων*], is based on Nos. **8** and **11**, and *C.I.G.* 1347.

4. *C.I.G.* 1274. *'Spartae prope flumen'; ex schedis Fourmonti.*

ϹΛΙΜΙ
ˌTACO
ϹΒ.ΥϹϹ
ΟΥΑΓ

Boeckh restored - - - *πρέσβυ*]*ς vel πρέσβει*]*ς Λιμ*[*ναέων* - -] *τὰς ὠ*[*βὰς πρέ*]*σβυς* - - - - [*β*]*ουαγ*[*ός* - - - . In the light, however, of the preceding inscriptions we must read

- - - *σφαιρεῖ*]*ς Λιμ*(*ν*)[*αέων οἱ νικήσαντε*](*ς*) *τὰς* (*ὠ*)[*βὰς ἀνέφεδροι, ὧν πρέ*]*σβυς* Σ - - - [*β*](*ο*)*υαγ*[*ός* - -

The length of the line is fixed as in Nos. **2** and **3** at approximately 21 letters: as the restoration *ἀνέφεδροι* gives a line of exactly the required length we may regard it as certain. The only doubtful point is whether we are right in restoring *βουαγός* in l. 4: the inscription might possibly be of the form *ὧν πρέ*]*σβυς* Σ[*ωσίστρατος* Σ*ωσιδάμ*]*ου*, *'Αγ*[*αθοκλῆς* - - - . I prefer, however, to retain Boeckh's restoration.

5. In the Sparta Museum (No. 647). On a fragment of greyish marble, broken on all sides. Height ·21 m.; breadth ·23 m.; thickness ·08 m.

ϽΔΙΑΙ
ΓΟΥΛΟ
ΤΟΥΣΤΟι
ΕΟΣϙΣϤ
ΤΕΣΤΑΣϹ
ΥΣϙΩΝΠ

- - - (*ς*), *δια*(*β*)[*έτεος δὲ αὐτεπαγγέλ*](*τ*)*ου Λο*[*υκίου*? - - -]*τους το*(*ῦ*) - - - - *εος· σ*(*φ*)[*αιρεῖς* - - - - *ων οἱ νικήσαν*]*τες τὰς* (*ὠ*)[*βὰς* - - - -]*υς, ὧν π*[*ρέσβυς* - - -

The length of the line, about 23 letters, is fixed by the phrase *διαβέτεος δὲ αὐτεπαγγέλτου*, if my restoration be correct. Although the letters are crowded more closely together in l. 5, we must have as short a name as possible following *σφαιρεῖς*, *i.e.* in all probability *Λιμναέων*.

6. R. Meister *ap.* Collitz-Bechtel, *Sammlung*, No. 4469, after Bourguet, *Bull. Corr. Hell.* xix. 547, No. 3. Neither editor has noticed

that the inscription was published by Hirschfeld in *Bullettino dell' Inst.* 1873, p. 214.

Meister's text is given thus: - - - *βιδέω* δὲ ΛΙΛ - - | - - ω *διαβέτεο*[ς] - - | - - ΓΕΛΤΩ *καὶ α* - - | - - - - . Hirschfeld's text differs from Bourguet's only in reading ΛΙΛ at the end of l. 1, ΕΟΥ in place of ΕΟΙ at the end of l. 2, ΙΙΛΙΙΚΩ above l. 1 and ΡΚΩΣΟΥΙ in place of ΡΥΟΣΟΥΙ in l. 4.

We may restore on the analogy of No. **1**

- - - *βιδέω* δὲ (Α)*ἰλ*[*ίω* - - - -]ω, *διαβετέου*[ς δὲ *αὐτεπαγ*]*γέλτω*
καὶ ἀ[*ριστίνδου τῶ δεῖνος* - - -

Bourguet conjectured *βιδέῳ* δὲ [Α]*ἰλ*[*ίῳ*]. In l. 2 it is uncertain whether we should read *διαβετέου* or *διαβετέου*[ς]: the form *διαβέτεος* given by No. **1** cannot be restored here in face of the concurrent evidence of Hirschfeld and Bourguet. The exact form of the genitive in Nos. **2**, **3**, **5**, **7** cannot be determined, but the occurrence of the accus. *διαβέτην* (Le Bas-Foucart, 174) shows that the word was one of those which varied between the first and third declensions.

7. *C.I.G.* 1273. *'Novae Spartae in horto Palatii archiepiscopalis'; ex schedis Fourmonti, iisque duplicibus.*

Fourmont's copy and Boeckh's transcription and restoration are as follows:

	- - - - - - - - - - -		. . . . .
	ΑΙΙΛΑ		. . . . .
	ΟΥΔΙΑΒΕΤ - - -		. *ου διαβέτ*[*ου* - - - - - -
	ΚΡΑΤΟΥϹΤΟΥϹ - -		*κράτους τοῦ Σ* - - - - - -
	ΤΟΥΔΕΤΗϹΦ - - -		*του δὲ τῆς φ*[*υλῆς* - - - *άρ* - ?
5	ΧΟΥΑΥΡΑΠΟ - - -	5	*χου Αὐρ. Ἀπο*[*λλωνί* - - *πρέσ*-
	ΡΕΙϹΑΙϺΝ - - - -		*β*]*εις* [Λ]*ιμν*[*αέων* - - - -
	ΤΑϹΩΒΑϹΛ - - - -		*τᾶς ὠβᾶς* Α - - [*δῶν πρέσ*-
	ΒΥϹΚΑΑΥΑ - - -		*βυς* Κλαύδ[*ιος* - - - - - -
	ΥΡΑΓΑΘΙΑ		Α]*ὐρ. Ἀγαθία*[*ς* - - - - - -
10	ΑΠΙϹΤΟΥ	10	*Ἀπίστου*, - - - - - - -
	ΙΙ . ΙΡΑΚΛΕ . Ϲ		*ἀ*]*π*[*ὸ*] *Ἡρακλέ*[*ο*]*ς*
	. ΥΡΗΛΙϹ		Α]*ὐρήλιο*[*ς* - - -
			. . . . .

I have not found it possible satisfactorily to restore this inscription except in ll. 6–8 where it follows the usual formula. After the *διαβέτης* occurs the mention of some official otherwise unknown, perhaps an *ἐπιμελητὴς τῆς φυλῆς*, but the omission of the article before his father's name in l. 5 is contrary to the general rule. *Ἀπίστου* in l. 10 is open to suspicion. One of Fourmont's copies reads ΑΠΙϹΤΟΥ, the other ΛΠΙΚΤΟΥ; I am inclined to combine these two, and read [*Εὐε*]*λπίστου* (*cf.* No. **9**, l. 7). In l. 11 I would prefer to ignore the II in the margin, and to read (*Ἡ*)*ρακλε*[*ίδη*]*ς* or (*Ἡ*)*ράκλε*[*ιο*]*ς*. With all due reserve, then, I would suggest:

- - - - - - *α*(*τ*)*ί*(*δ*)*α* - - -? | . *ου, διαβέτ*[*εος δὲ Ἀριστο*?]|*κράτους τοῦ*
5 *Σ* - - - [*ἐπιμελη*?]|*τοῦ δὲ τῆς φ*[*υλῆς* - - *ἀρ*?]‖*χου Αὐρ. Ἀπο*[*λλ* - - -·
σφαι]|*ρεῖς* (*Λ*)*ιμν*[*αέων οἱ νικήσαντες*]|*τὰς ὠβὰς* (*ἀ*)[*νέφεδροι, ὧν*
10 *πρέσ*]|*βυς Κ*(*λ*)*αύ*(*δ*)[*ιος* - - - - | *Α*]*ὐρ. Ἀγαθία*[*ς* - - - *Εὐε*]‖(*λ*)*πίστου*? - - | (*Ἡ*)*ράκλε*[*ιο*]*ς* - - - | [*Α*]*ὐρήλιο*[*ς* - - -

8. *C.I.G.* 1272. *'Spartae prope ecclesiam D. Nicolai'; ex schedis Fourmonti.*

Fourmont's text and Boeckh's transcription and restoration are as follows:

	- - - -		[*Ἐπὶ πατρονόμου*]
	ΓΑΙΟΥΙΙ		*Γαΐου Ἰ*[*ουλίου Παν*]-
	ΘΑΛΟΥΣ		*θάλους* - - -
	ΣΤΕΑ ΣΦΥ		. . . . . *φυ*[*λῆς Κονοου*-
	ΡΕΩΝΟ		*ρέων ο* - - - -
5	ΤΑΣΩΒΑΣ	5	*τὰς ὠβᾶς* - - [*δῶν*
	ΠΡΕΣΒΥΣ		*πρέσβυς*
	ΑῩ. ΣΩΤΗΡ		*Αὐρ. Σωτήρ,*
	ΑῩ. ΕΥΤΥΧΟ		*Αὐρ. Εὔτυχο*[*ς,*
	ΑῩ. ΝΕΙΚΗΦΟΙ		*Αὐρ. Νεικήφορ*[*ος,*
10	ΜΕΜΜΙΟΣΣΩ . .	10	*Μέμμιος Σω* - -
	ΑῩ. ΠΡΑΤΥΛΟ		*Αὐρ. Πρατύλο*[*ς,*
	ΑῩ. ΕΠΙΓΟΝΟ		*Αὐρ. Ἐπίγονο*[*ς,*
	ΑῩ. ΕΥΤΥΧΗ		*Αὐρ. Εὐτύχη*[*ς,*
	ΑῩ. ΑΓΑΘΟΠΟ		*Αὐρ. Ἀγαθόπο*[*υς,*
15	. . ΕΜ̄. ΠΑΡΜΕΝΟΙ	15	*Μ*]*έμ. Παρμέν*[*ων*?
	. ΥΡ̄. . . .		*Α*]*ὐρ.* - - - -

I have no alterations to suggest in the latter part of this transcription (lines 7 foll.), but the restoration of the first part is open to grave objection, since it leaves only one line of 16–18 letters for recording the names of the *βίδεος* and the *διαβέτης*. It also fails to explain l. 3, and it ignores the last element in Fourmont's copy of l. 1: this last difficulty might be avoided by reading Γα(ΐου) Ἰου(λίου) (Π)[αν]θάλους, but that would give too short a line. The change of a single letter will enable us to give a satisfactory restoration: reading ΣΦΑ at the end of line 3 we see that the sign immediately preceding is a mark of punctuation, and that we have the usual formula *σφα[ιρεῖς, etc.* The first two lines can then be restored by the aid of *C.I.G.* 1328, *προσδεξαμένου τὸ ἀνάλωμα* Γαΐου Πομ. Πανθάλους Διογένου Ἀριστέα, *ἀρχιερέως τῶν Σεβαστῶν, κ.τ.λ.* and *Bull. Corr. Hell.* ix. p. 514, No. 6, Ἡ *πόλις* Πομπώ. Πανθά[λη] Διογένη Ἀριστέ[α] *κ.τ.λ.* We thus obtain:

[*διαβέτεος δὲ*] | Γαΐου (Π)[*ομπωνίου Παν*]|*θάλους* [*Διογένου Ἀρι*]|*στέα·*
5 *σφ*[*αιρεῖς Κονοου*]|*ρέων ο*[*ἱ νικήσαντες*] || *τὰς ὠβὰς* [*ἀνέφεδροι, ὧν*] | *πρέσβυς.*

The restoration *ἀνέφεδροι* (l. 5) is uncertain, but the fact that it makes the line approximately equal in length to lines 1–4 is strongly in its favour.

9. Le Bas, *Revue Archéol.* 1844, p. 705, No. 18; Ross, *Arch. Aufsaetze* ii. p. 659, No. 21; Le Bas-Foucart, 180; Dressel-Milchhoefer, *Athen. Mitt.* ii. p. 383, No. 200.

Ἀγαθεῖ *τύχ*(*ε*)[*ι*]]. Νίκη Νεο(*π*)[*ο*]|*λειτῶ*[*ν*].| Ἐπὶ *πατρονό*(*μου*)
5 Θεολύκου || *τοῦ τὸ ε', ἐπιμελουμένου* | *πατρονό*(*μου*) Μ(*άρκου*) Αὐρ(*ηλίου*) Ἀλκισθένου[*ς*] | *τοῦ* Εὐελπίστου *προστάτ*[*ου πό*] | *λεως, βιδεου δὲ* Μ(*άρκου*) Αὐρ(*ηλίου*) Ῥο[*ύφου ?*] | (*τοῦ*) - - -

Previous editors have restored *προστάτ*[*ου τῆς πό*]*λεως* (l. 7), but there is no room for the article on the stone nor is it necessary on linguistic grounds (*cf. Bull. Corr. Hell.* ix. p. 515, lines 17, 18, Μάρ. Αὐρ. Ἀλκισθένους *τοῦ* Εὐελπίστου *προστ*[*ά*]|*του πόλεος*).

Above the main body of the inscription (ll. 4 foll.) was a relief of poor workmanship in a triangular field, thus described by Ross (*loc. cit.*): 'A draped female figure stands full-face, with four arms; the upper r. arm holds a tip of the garment over the shoulder, the lower r. arm an olive

branch towards which a serpent raises itself; the l. upper arm holds a bow, the lower a shallow saucer. To the l. of the figure lies a large ball, to the r. behind the serpent stands a kind of amphora.' Unfortunately, the stone was almost entirely destroyed by fire, only a small fragment of it still existing when Le Bas visited Sparta.

I add here two inscriptions which, though not parallel in formula to the foregoing, bear upon the subject of the Spartan *σφαιρεῖς*.

10. In the Sparta Museum (No. 721). On a slab of grey stone: height ·75 m.; breadth ·46 m.; thickness ·11 m. Le Bas, *Revue Archéol.* 1844, p. 637; Keil, *Intelligenzblatt zur allg. Literatur*, 1847, col. 395; Le Bas-Foucart, 164; Dressel-Milchhoefer, *Athen. Mitt.* ii. p. 439, No. 18 (lines 3–10 only); Collitz-Bechtel, 4478. The following text rests on my own copy of the inscription. I have printed in capitals those letters which were seen by former editors but have now been lost owing to the edges of the stone having been somewhat chipped.

['Επὶ Με]ΝΕΚΛΕΟ[υς | οἱ σφ](αιρεῖς οἱ ν) | (κάσαντες)· ΜΑΧ - - | - - - ς
Νικοκράτης (Νικοκράτους). βας | - - κίδας Φιλοστράτου. || - - ομένης
'Επικτήτου | - - ιππίδας 'Επικράτους. | - - ο - - - - - _ - - | [Ε]ὔνικος. |
[Σ]ώανδρος Τρύφωνος. || Κύδανος 'Ιππάρχου. | Καλλικράτης Φιλο-
στράτου. | Δάμιππος Τιμοκράτους. | Κλεόμαχος (Κλεομάχου). |
Εὐδαιμοκλῆς Εὐδάμου. || Σώστρατος Θεοδώρου. | Ξ Ενάκων 'Αντιβίου.

Below the inscription is a disc, with a vase to the l. and a palm branch to the r. Of the letters in l. 2 enclosed in round brackets only slight traces are now distinguishable.

No satisfactory explanation has yet been offered of the letters ΜΑΧ in l. 2 and ΒΑΣ in l. 3, nor of the initial Σ of l. 3.

11. *C.I.G.* 1386. *'Spartae prope portam orientalem'; ex schedis Fourmonti.*

'Η πόλις | Μ. Αὐρ. Παλαιστρείτην, | σφαιρέα Κονουρέα, | σωφροσύνης
τε καὶ || ἀνδρείας ἕνεκα, προσ | δεξαμένων τὸ ἀνάλω | μα Αὐρηλίων
'Αφροδῶς | καὶ Σωτείρας τῶν | ἀδελφῶν αὐτοῦ.

The date of the inscriptions can be approximately fixed. The similarity of the formulae used in Nos. **1–9** makes it antecedently probable that they all belong to the same period, and with this the evidence of the

writing conforms. A *terminus post quem* is gained from Nos. **2**, **7**, **8** and **9**, in which the name Aurelius occurs. This may indeed be found in rare instances before the age of the Antonines, but the cumulative evidence of the four inscriptions, and the fact that in two of them (Nos. **2** and **9**) the *praenomen* Marcus is prefixed, while in No. **7** the name occurs twice, and in No. **8** eight times, puts the matter beyond a doubt. Ἀφροδείσιος, the only name which occurs in No. **3**, is frequently met with in Spartan inscriptions, but almost exclusively at this period.[1] Nos. **4** and **5** are small fragments which contain no names at all. Nor does the employment of dialect forms in No. **6** point to an earlier date, for one of the characteristics of the age of the Antonines was an archaistic revival of dialect forms,[2] and the inscription is written in 'grandes lettres de l'époque impériale' (Bourguet, *Bull. Corr. Hell.* xix. p. 547).

In the case of No. **1** our evidence is still more explicit. The eponymous patronomus by whom the inscription is dated recurs in *C.I.G.* 1354, the identification being rendered certain by the addition to his name in both cases of the epithets φιλόκαισαρ καὶ φιλόπατρις. Boeckh (note *ad loc.*) has attributed him with considerable probability to the reign of Caracalla (211–217 A.D.). His brother, M. Αὐρήλιος Ἀριστοκράτης Δαμαινέτου, was hereditary priest of Heracles and the Dioscuri (*C.I.G.* 1353, 1355): it is very probable that the Δαμαίνετος Ἀριστοκράτους who appears in our inscription as διαβέτης was the son of this man and nephew of the eponymous patronomus.

Of the two remaining inscriptions No. **11**, which commemorates a single σφαιρεύς, belongs to the same period as those we have discussed, while No. **10**, which in the greater simplicity of its formula and the absence of Roman gentile names bears marks of an earlier date, can be plausibly attributed (Le Bas-Foucart, No. 164 note) to the reign of Nerva (96–98 A.D.).

A general view of the formulae employed in Nos. **1**–**9** may be gained from the following table: a + denotes that the item in question is found, or can be restored with reasonable certainty, in the inscription, while a − denotes that it is certainly wanting.

[1] [Ἀφ]ροδείσιος Εὐκαταλλάκτου, Le Bas-Foucart, No. 168*i*: M. Αὐρ. Ἀφροδείσιος, *C.I.G.* 1350: Αὐρ. Ἀφροδεισία, *C.I.G.* 1379: Αὐρ. Ἀφροδώ, *C.I.G.* 1386 (No. **11**, above). The only doubtful instance is Le Bas-Foucart, 248*c*, from Gythion.

[2] *Cf. Athen. Mitt.* 1904, p. 51.

	1	2	3	4	5	6	7	8	9
ἀγαθῇ τύχῃ	+								+
νίκη Νεοπολιτῶν *vel sim.*	−								+
ἐπὶ πατρονόμου τοῦ δεῖνος	+								+
ἐπιμελουμένου τοῦ δεῖνος	−								+
βιδέου δὲ τοῦ δεῖνος	+	+	+			+			+
διαβέτεος δὲ τοῦ δεῖνος	+	+	+		+	+	+	+	
αὐτεπαγγέλτου	+	−	−		+	+	−		
ἀριστίνδου	+	−	−		−	+	−		
[ἐπιμελη?]τοῦ δὲ τῆς φ[υλῆς?] ...	−	−	−		−		+	−	
σφαιρεῖς Νεοπολιτῶν *vel sim.*	+	+	+	+	+		+	+	
οἱ νικήσαντες τὰς ὠβὰς	+	+	+	+	+		+	+	
ἀνέφεδροι	+	+	+	+			+	+	
ὧν πρέσβυς ὁ δεῖνα	+	+	+	+	+		+	+	
Catalogue of names...	+						+	+	

The language of the inscriptions does not call for special notice. One only (No. **6**) is written consistently in Doric, while in the rest, so far as we can judge from the fragments preserved to us, Doric archaism appears only in the word *νικάσαντες* (Nos. **1**, **3**, and perhaps also **4**–**9**).

It is clear at first sight that these inscriptions were set up to commemorate a series of victories in similar contests, and the mention of the eponymous patronomus at the beginning makes it probable that this contest was an annual one. The competitors are termed *σφαιρεῖς*, a word which recurs only in a single passage of Pausanias (iii. 14, 6), *ἔστι δὲ ἄγαλμα ἀρχαῖον Ἡρακλέους, ᾧ θύουσιν οἱ σφαιρεῖς· οἱ δέ εἰσιν οἱ ἐκ τῶν ἐφήβων ἐς ἄνδρας ἀρχόμενοι συντελεῖν.* Whether the title was retained for several years or was given only during the first year after the attainment of manhood we cannot say for certain, though the latter alternative appears to me to be the more probable. That the name was directly derived from *σφαῖρα* and points to some kind of ball-game as forming a prominent element in the training of those who reached this age can hardly be doubted, and if that is so we cannot wonder at the omission of any specific

mention of the nature of the contest referred to in our inscriptions: in fact, the word σφαιρεῖς has here a twofold signification, indicating not only the age and status of the competitors, but also the character of the contest in which they were victorious.

Again, the competitors took part not as individuals but as representatives of divisions of the Spartan state. In every case a word—Λιμναέων, *etc.*—is added to the term σφαιρεῖς indicating the body from which they were chosen: that those bodies were the obes is proved by the phrase οἱ νικήσαντες τὰς ὠβάς. The word ἀνέφεδρος occurs elsewhere only in three inscriptions from Olympia,[1] but its meaning is plain: the ἔφεδρος is 'a third combatant, who sits by to fight with the conqueror of two' (L. and S.), or, in other words, 'one who has drawn a bye' in a contest, and the ἀνέφεδρος is he who goes on meeting antagonist after antagonist without the interval for rest afforded by drawing a bye.[2] The employment of the word in the Olympian inscriptions shows that this was regarded as enhancing the glory of a victory, and here doubtless the word has the same purpose: it is a curious fact, however, that it occurs in six out of the nine inscriptions in our series, and even in the other three is not certainly lacking. Either we must believe that a remarkable chance has preserved to us only, or almost only, monuments of these specially meritorious victories, or else we may conjecture that only in such cases was a permanent memorial erected. This latter supposition seems to me to be by far the more probable. We do not know by whom these inscriptions were set up save in one case where the name of the ἐπιμελούμενος is placed after that of the eponymous patronomus and is that of a patronomus, probably a member of the obe possessed of wealth and position who gladly took this opportunity of commemorating himself along with the victorious ball-team of his obe. In ordinary cases the expense was probably borne by the obe.[3]

The inscription closes with the names of the team, headed by that of the captain. How the latter was chosen—whether by the members of the team, or by the whole body of σφαιρεῖς of the obe in question, or by the obe itself, or even by the διαβέτης or βίδεος—we have no means of

[1] *Olympia* v. Nos. 54, 225, 227: in all three cases the contest is the παγκράτιον.

[2] Dittenb., *Syll.*[2] 683, note 1 *is qui nunquam per totum certamen sortis felicitate* ἐφεδρείαν *nanctus est, ita ut continua priorum certaminum serie defatigatus ad illam supremam de corona dimicationem perveniat.* Van Herwerden, *Lex. Supplet. s.v.*

[3] See also note on No. **2**.

deciding, nor are we in a position to say of how many members the team consisted, since none of our inscriptions preserves the full list of names. That the numbers were the same from year to year and for all the obes can scarcely be doubtful, but our sole evidence is that of No. **10** which is unsatisfactory for two reasons; firstly, because it falls somewhat outside our series both in time and in formula, and, secondly, because the number of names commemorated in it—either fourteen or fifteen—is uncertain.[1]

We have already seen that the name of the patronomus is inserted merely to mark the date of the contest. The two officials whose names follow are more closely connected with the competitors. As regards the bidei, it is expressly stated by Pausanias[2] that they were responsible for some of the games of the ephebi, and Boeckh[3] concluded from No. **3** that the duties of the *διαβέτης* also were connected with the gymnasium. Though unable to define precisely the functions of the two offices, we may notice one or two significant differences between them. The bidei, five in number, form a board of magistrates (*συναρχία*) which frequently appears in Spartan inscriptions: there is no reason to suppose that they were assigned to separate obes, and we shall probably be right in thinking that the bideus referred to in each of our inscriptions was the president (*πρέσβυς*) of the college during that year.[4] On the other hand we never meet with a college or board of *διαβέται*. The title is found elsewhere either alone or in the phrase *διαβέτης Λιμναέων*, but we shall not follow Boeckh[5] in concluding that the latter is the full title of which the former is an abbreviation. The *σφαιρεῖς*-inscriptions certainly lead us to suppose that each obe had its own *διαβέτης*, elected doubtless from among the members of that obe and having certain functions to perform in reference to it. That we do not possess in full the titles *διαβέτης Κονοουρέων*, *διαβέτης Μεσοατῶν*, *etc.*, is due to the fact that in these inscriptions it went without saying that the *διαβέτης* mentioned in connection with a victorious obe was the official attached to that obe. That the office was a species of

[1] The uncertainty is due to the enigmatical letters ΜΑΧ and ΒΑΣ in lines 2, 3: it has been suggested that these may represent a name accidentally omitted and later added in the margin (Foucart, *ad loc.*).

[2] iii. 11, 2 *τοῖς Βιδιαίοις τοὺς ἐπὶ τῷ Πλατανιστᾷ καλουμένῳ καὶ ἄλλους τῶν ἐφήβων ἀγῶνας τιθέναι καθέστηκεν.*

[3] *C.I.G.* p. 611b.

[4] It might be suggested that the *βίδεος* in these cases is an obe-official distinct from the state magistrate of the same title. This, however, I do not regard as at all likely.

[5] *C.I.G.* p. 611a.

λειτουργία entailing trouble and expense may be inferred from the fact that in three cases the epithet 'voluntary' (αὐτεπάγγελτος) is added.[1] The meaning of the further title ἀριστίνδης, which is applied to a voluntary διαβέτης once at least in our inscriptions, is uncertain, as the word does not, I believe, occur elsewhere. The title may possibly be one which was bestowed by the obe for distinguished service, corresponding to that of ἀριστοπολιτευτής which was granted by the state either for a term of years or for life.[2]

We have seen reason to believe that the ball contest referred to in our inscriptions took place annually between about fifteen representatives of each of the obes selected from those who were just entering manhood. That it took place in the Δρόμος at Sparta is not improbable, since the statue of Heracles to which the σφαιρεῖς sacrificed was close to the Δρόμος, and is mentioned by Pausanias in connection with the latter (iii. 14, 6). The ball is doubtless represented by the disc engraved at the foot of No. **10** as well as by that in the relief above No. **9** described by Ross. Further, the contest was one in which team was pitted against team, not individual against individual: to me, at least, this seems to follow necessarily from the application of the word ἀνέφεδροι to all the members alike, and from the absence of anything to suggest the defeat of some members of the winning side. The same word also shows that the victory was not decided by playing each obe against all the rest in turn and reckoning by points, but by matching them in pairs in successive rounds until only one unbeaten team remained. More than this the inscriptions do not teach us, and it is not my object to add by way of repetition to the already extensive literature dealing with Greek and Roman ball games.[3]

In conclusion I may refer to what is perhaps the most interesting point raised by these σφαιρεῖς-inscriptions, namely that of the composition and number of the Spartan obes and their relation to the tribes. The question is an exceedingly obscure one, and though I am unable to advance any solution, yet the statement of some evidence which, so

[1] *Cf. C.I.G.* 1365, ἐπὶ τῇ δευτέρᾳ γυμνασιαρχίᾳ ἣν αὐτόθεν ὑπέστη.

[2] See note on No. **2**. This supposition is not necessarily disproved by the fact that in No. **3** a διαβέτης bears the title αἰώνιος ἀριστοπολιτευτής: I would rather take this to indicate that the office of διαβέτης was not always, though it was in many cases (*C.I.G.* 1241 i, ii, 1242, 1243), the first, or nearly the first, step in the *cursus honorum*.

[3] H. Blümner, *Lehrbuch der Griech. Privatalterthümer*,[3] p. 292 and the works cited there: Α. Δ. Κεραμόπουλλος, Αἱ Ἐπωνυμίαι τῶν Ἀγαλμάτων (Athens, 1903), p. 60 foll.; Marquardt, *Privatleben der Römer*,[2] p. 841 foll., and *De Sphaeromachiis veterum disputatio* (Güstrow, 1879).

far as I know, has hitherto escaped notice may enable others to arrive at the true explanation.

Writers on Spartan antiquities have agreed[1] that the Spartiates were originally divided into the three tribes—Ὑλλεῖς, Πάμφυλοι and Δυμᾶνες—which are found in all Dorian states, and that there were also a number of local phylae, either existing side by side with these or substituted for them at a later period. How many of these local tribes existed is a disputed point, but it is taken as certain that four of them are those enumerated by Pausanias (iii. 16, 9), *viz.* Limnae, Cynosoura, Mesoa and Pitane, while, as a fifth, Dyme is usually added on the strength of Hesychius' testimony, Δύμη· ἐν Σπάρτῃ φυλὴ καὶ τόπος. Of these tribes the obes are regarded as subdivisions, whether corresponding to the phratries[2] or no. Turning to the inscriptions we find direct evidence for two of the local tribes: in *C.I.G.* 1347 we have the phrase ἀπὸ φυλῆς Κονοουρέων τῶν τιμῶν δοθεισῶν, while in *C.I.G.* 1377 we meet with a πρέσβυς τῆς Λιμναέων φυλῆς. But we are confronted with the startling fact that of the four tribes regarded as certain two appear also as obes. For we have seen that the ball-teams being pitted against the obes must each represent one of the obes; but we have in two cases (Nos. **4** and **7**) σφαιρεῖς Λιμναέων and in two (Nos. **3** and **8**) σφαιρεῖς Κονοουρέων, *i.e.* Κυνοσουρέων, while in No. **2** we shall probably be right in restoring either [Μεσο]ατῶν or [Πιταν]ατῶν. This evidence seems to me to be conclusive, and it is clinched by that of an unpublished inscription:

> In the Spartan Museum: Catalogue No. 270. On a fragment of greyish marble: height ·14 m.; breadth ·47 m.; thickness ·13 m. Provenance unknown.
>
> ϽΒΛΛΙΜΝΛΕΩ
>
> (ὠ)β(ὰ) Λιμν(α)έω[ν].

In this connection Hesychius' gloss ὠβάτας· τοὺς φυλέτας also deserves notice. Were, then, the tribes and the obes the same subdivisions of the

[1] See Thirlwall, *History of Greece*, i. App. II, where the previous literature is discussed: Busolt, *Griech. Staats- und Rechtsaltertümer*[2] in Iwan Müller's *Handbuch* p. 100: Thümser, *Griech. Staatsaltertümer*[6] in K. F. Hermann's *Lehrbuch*, p. 164–166. Grote (*History of Greece*, New Edition, London, 1884, vol. ii. p. 362) regarded the evidence as too scanty to afford any probable conclusion: 'At Sparta, though we seem to make out the existence of the three Dorian tribes, we do not know how many tribes there were in all; still less do we know what relation the Obae or Obês, another subordinate distribution of the people, bore to the tribes.'

[2] Demetrius of Scepsis speaks of 9 τόποι, which seemingly correspond to 9 tribes, and of 27 φρατρίαι (Athen. iv. 141 F).

state looked at from different standpoints? Were the conditions of membership the same in both cases? And at what period did an arrangement which is plainly not original come into being? Or was each tribe named after the most important of the obes which composed it, as in the case of the Attic demes and trittyes? To these and other questions which naturally suggest themselves the defective evidence at our command gives no answer. We can only say that the evidence of inscriptions establishes the existence of the following obes during the Imperial period:

1. Λιμναεῖς—Nos. **4** and **7**: *C.I.G.* 1241: Spartan Catalogue No. 270;
2. Κονοουρεῖς—Nos. **3**(?), **8** and **11**;
3. Ἀμυκλαεῖς—*Ath. Mitt.* iii. p. 165;
4. Νεοπολῖται—Nos. **1** and **9**;[1]

and that analogy warrants us in assuming the existence of two others:

5. Μεσοάται—possibly to be restored in No. **2**;
6. Πιτανάται—*C.I.G.* 1425, 1426 (though the reference in these two cases may be to the tribe and not to the obe); perhaps [Πιταν]ατῶν is to be restored in No. **2**.

[1] Foucart supposed that No. **9** commemorated a victory won by the inhabitants of a city Neopolis, of which Marcus Aurelius Alcisthenes was προστάτης. But

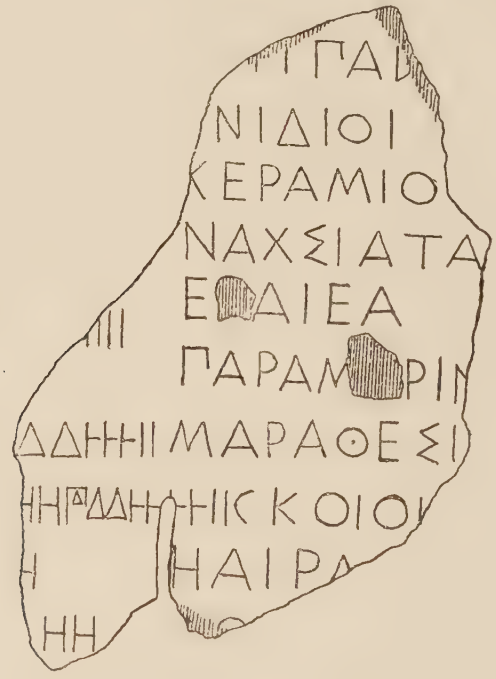
1. The commoner form is Νεαπολιτῶν, not Νεοπολιτῶν.
2. That προστάτης πόλεως refers to Sparta and not to Neopolis is proved by *Bull. Corr. Hell.* ix. p. 515, a Spartan inscription in which, though no mention of Neopolis or Neopolitans occurs, the same title is given to the same man.
3. The fact that No. **9** falls into its place in the series of σφαιρεῖς-inscriptions shows that the Νεοπολῖται referred to formed an obe, a fact which is proved by the occurrence of the same obe in No. **1**.

The only question is whether we are to see in them the inhabitants of a 'Sparta New Town,' or whether, as seems to me far more probable, the strictly local principle was in this case abandoned, and all those who were on some occasion admitted to civic rights were united in the obe of 'the newly-enfranchised' (*Cf.* Diodor. xiv. 7, 4, τοὺς ἠλευθερωμένους δούλους, οὓς ἐκάλει νεοπολίτας, and Athen. 138A).

MARCUS NIEBUHR TOD.

A NEW FRAGMENT OF THE ATTIC TRIBUTE LISTS

On May 22nd 1904, one of the workmen engaged on the restoration of the Erechtheion noticed an inscribed fragment of white marble lying on the surface of the ground a little to the west of that temple. It was afterwards deposited in the Acropolis Museum, where I was able to take a copy and a squeeze by the kind permission of Mr. D. Philios, Ephor of the Acropolis, to whom my warm thanks are due for giving me permission to publish the inscription, as also to Mr. G. P. Stevens of the American School at Athens, who first drew my attention to the discovery of the stone. The fragment in question is ·15 m. long, ·14 m. broad and ·10 m. thick, and contains portions of ten lines.



[HH]	['Aστ](υ)πα(λ)[αιῆς].	
- - -	[K]νίδιοι.	
- - -	(K)εράμιο[ι].	
[ΠΗΗΙΙ]	Nαχσιᾶτα[ι].	
[ΔΠΗ](Ι)ΙΙΙ	'E[λ]αιέα	5
	παρὰ M[ύ]ρι(ν)[αν].	
[Δ]ΔΔΗΗΙΙ	Mαραθέσι[οι].	
[Η](Η)ΗΡΔΔΗΗΗΙΙC	Kῶιοι.	
[Η](Η)	Hαιρ(α)[ῖοι].	
[HH]HH	[K](ο)[λοφόνιοι].	10

The letters are well and carefully engraved, and show the forms usually met with in the second half of the Vth century B.C. It is clear at first sight that we have here a fragment of the well-known Attic Tribute Lists, or, to be more correct, the lists of the quotas dedicated to Athena from the tribute levied by Athens. As, however, these quotas always amounted to $\frac{1}{60}$ of the whole sum received, we are in a position to calculate from them the amounts paid in tribute by the several members of the Confederation.

Further, the place-names on this fragment all belong to the same geographical area, for the 'Αστυπαλαιῆς, Κνίδιοι, Κεράμιοι, Ναξιᾶται and Κῷοι belong to the Carian district, while the 'Ελαιῦται, Μαραθήσιοι and Αἰραῖοι are included in the Ionian tribute-area. This fact proves that the inscription cannot be earlier than Ol. 85, 2 (439/8 B.C.), the date at which an assessment came into force by which those two areas were amalgamated. We can, however, move forward our *terminus post quem* seven years, for the quota lists of the 'Ιωνικὸς φόρος for the years 85, 2; 85, 3; 85, 4; 86, 3 and 86, 4 have entirely perished, though the stones on which they were recorded are extant (*I.G.* I. 241–3, 246), while those for the years 86, 1 and 86, 2 as preserved (*I.G.* I. 244, 245) contain five and two names respectively which also occur in our inscription. We are thus justified in asserting that the earliest year to which this latter can be attributed is Ol. 87, 1 (432/1 B.C.).

There are two obstacles in the way of our fixing directly a *terminus ante quem*: the mutilated condition of our fragment does not permit us to restore with certainty the quotas contained on the left-hand side of the column, while our knowledge from other inscriptions of the amount of

tribute paid by the Ἐλαιῖται, Μαραθήσιοι, Κῷοι and Αἰραῖοι during the IVth and Vth Periods of assessment is exceedingly meagre, consisting of the sole fact that the Μαραθήσιοι paid a tribute of 2000 dr. in Period IV. Nevertheless I think that the date of our fragment can be fixed, if not with absolute certainty, at any rate with a considerable degree of probability.

We have in *I.G.* I. 256 a quota list belonging to the year Ol. 88, 1 (428/7 B.C.): the beginning of the list is broken off, but that part of the Ἰωνικὸς φόρος which remains contains the names of twenty-seven places. Now a similar list (*I.G.* I. 244) recording the quotas paid in Ol. 86, 1 contains forty-six names in the Ionian-Carian area, and we may therefore assume that about the same number would occur in *I.G.* I. 256 if it were complete. In other words there are only about nineteen names missing at the beginning of *I.G.* I. 256. But those nineteen include every one of the eight which appear in our fragment. It is impossible for me to regard this fact as a mere coincidence, and I feel sure that anyone who studies the 'Tribute Lists' in question, and sees how the eight names are elsewhere scattered over the whole catalogue of the Ἰωνικὸς φόρος will agree with me. I think therefore that we have strong evidence for assuming that our fragment belongs to *I.G.* I. 256, *i.e.* to the year 428/7 B.C., if there are no other facts to contradict this view.

I have already mentioned that in Period IV (to which, on the supposition just made, our fragment must be attributed) the Marathesioi paid a tribute of 2000 dr., of which a quota of $33\frac{1}{3}$ dr. (ΔΔΔΗΗΙΙ) was paid to Athena. This is in perfect accord with the -ΔΔΗΗΙΙ which remains on the stone, and enables us to fix the position of the left margin of the column. The tribute-quota of Kos will then be ΗΗΗ𐅅ΔΔΗΗΗΙΙC or 𐅅ΗΗ𐅅ΔΔΗΗΗΙΙC, for ΧΗΗ𐅅ΔΔΗΗΗΙΙC is so high a sum as to be out of the question. This will give a tribute of 3 tal. 4465 dr. or 7 tal. 4465 dr. Of the alternatives we need have little hesitation in choosing the former, since the tendency of the assessment of Ol. 85, 2 was to restore the taxation of Period II, during which Kos had paid 3 tal. 3360 dr. In a similar manner it can be shown that the quota of the Αἰραῖοι is ΗΗ or 𐅅Η, of which we must accept the former, which gives a tribute of 2 talents. Lastly, since the tribute of Elaiea in Periods I and III, and presumably in Period II also, is 1000 dr., and its quota $16\frac{2}{3}$ dr. (Δ𐅅ΗΙΙΙΙ), we may confidently restore the last-named sum in our inscription, exactly filling the required space.

We thus get for the four cities in question the following tribute-table in which the items printed in dark type are known for the first time from our present inscription.

	PERIOD I Ol. 81, 3–82, 2	PERIOD II Ol. 82, 3–83, 2	PERIOD III Ol. 83, 3–85, 1	PERIOD IV Ol. 85, 2–88, 3
Αἰραῖοι	3 t.	3 t.	1 t.	**2 t.**
Ἐλαιέα	1000 dr.	—	1000 dr.	**1000 dr.**
Κῷοι	—	3 t. 3360 dr.	5 t.	**3 t. 4465 dr.**
Μαραθήσιοι	—	—	3000 dr.	2000 dr.

We must also restore in lines 1 and 4 the quotas which we know to have been paid during this period on the tribute of the Astypalaies and Naxiatai, namely HH (200 dr.) and ΠΗΗΙΙ (8 dr. 2 obols) respectively.

But we may take a still further step. The city which stood in line 10 must have been a wealthy and important one since it paid a tribute of at least 4, possibly 8, talents. We must therefore look for a city (1) belonging to the Ἰωνικὸς φόρος, (2) capable of paying a tribute of 4 talents, yet (3) whose tribute assessment in Period IV is unknown; this last follows from the fact that no Ionian or Carian city is known to have paid either 4 or 8 talents during this period: finally, (4) it must be a city which does not occur either in the fragment under discussion or in the list of the Ionian-Carian tribute contained in *I.G.* I. 256, unless it be in the first restored line of the latter. These conditions are fulfilled by the Κολοφώνιοι, Λεβέδιοι, Τελμήσσιοι, Τερμερῆς, Τήιοι and Φωκαιῆς. One of these names, then, is to be restored in line 10, and since enough is left of the second letter to show that it was circular, this list is reduced to two names, ΚΟLΟΦΟΝΙΟΙ and ΦΟΚΑΙΕΣ.

Again, the opening lines of *I.G.* I. 256 are

```
                    I
                   OI
                 ⌣ΦONIOI
. _ıFII  NOTIES
```

from which we conclude

(1) that the word immediately preceding **Κολοφώνιοι** consisted of eight letters and ended in *-οι* ;

(2) that the previous word was shorter, so that nothing of it is left on the stone ;

(3) that the word before this consisted of 10 letters of which the last was *-ι*.

Now these data fit exactly the three names

ΜΑΡΑΘΕΣΙΟΙ
ΚΟΙΟΙ
ΗΑΙΡΑΙΟΙ

Taking this and our former conclusion in conjunction we have the practically certain result that **Κολοφώνιοι** must be restored in line 10, and that *I.G.* I. 256 and the new fragment are contiguous. We may therefore add to the table previously given the following item :—

	PERIOD I	PERIOD II	PERIOD III	PERIOD IV
Κολοφώνιοι	3 t.	—	1 t. 3000 dr.	**4 t.**

It only remains for me to add that since writing the foregoing I have been enabled by the courtesy of Mr. Kabbadias to try experimentally whether our fragment belongs to *I.G.* I. 256, which is in the Epigraphical Museum at Athens. The result is to prove beyond a doubt that it exactly fits on at the top of the larger slab, from which it has been broken. This renders unnecessary a good deal of the argument employed above, but as it may be of some interest as an example of epigraphical method I have decided to publish it as it stands.

MARCUS NIEBUHR TOD.

NOTES FROM KARPATHOS.

§ 8.—The Dialect.

These notes are for the most part devoted to questions of phonetics, dealing more with *Lautlehre* than with *Formenlehre*, and do not pretend to give a complete account of the dialect. I have thought this side of the subject most worth developing, because it is that which native collectors, excellent from the sides of lexicography and literature, are apt to neglect.[1]

The dialect of Karpathos belongs to the south-eastern or south-Sporadic group of modern Greek dialects, which extends over Cyprus, Rhodes, Kos, Kalymnos, and other islands as far north as Chios. Its connexion with Cretan has also been recognized. Beaudouin, *Étude du Dialecte Chypriote*, has pointed out some of its peculiarities, remarking that it is too near Cyprian to be regarded as an independent dialect. To judge from his account of Cyprian and the specimens in Σακελλάριος, Κυπριακά, it possesses however a marked individuality. He also has published notes on the dialect in the *Bull. de Corr. Hell.* iv. p. 364, with bibliographical notes. The most important literary sources are, however, the songs and glossary given by Manolakákis in Καρπαθιακά, his contributions to Ζωγραφεῖος Ἀγών,[2] and those of Chaviarás, whose work is very much the better as a phonetic record.[3] In the following notes I have supplemented my own observations from these sources,

[1] The following abbreviations are used: E. = Elymbos, Mes. = Mesochória, Men. = Menités, P. = Palaíkastro, V. = Voládha, K. = Karpathos.

[2] Quoted as Καρπ. and *Z. A.*

[3] My copy of Manolakákis' Δωρικὸν ψήφισμα Καρπάθου, Athens, 1878, containing also songs I have unfortunately lost. The other scattered pieces that have been published are unimportant.

adding in each case a reference. The sources of my information were conversations at Elymbos, Voládha, and Menités with schoolmasters and priests. These schoolmasters were in all cases natives, and though they had themselves spent some time in Athens, were perfectly conversant with the dialect. They had in fact, like most Greeks, two languages. Their wives and daughters were unable to talk anything but the dialect, and their pronunciation, especially at Voládha, was very useful. A good many peculiarities I was able to note and corroborate from muleteers and peasants. As is generally the case in Greece, the dialect varies slightly from village to village. In Karpathos the distance between the village-groups and the difficulty of communication favour this extreme subdivision. I have therefore noted the local distribution of certain phenomena.

By way of contrast, and also to shew the Cretan influence in Karpathos, I have added some notes on the dialect of Palaíkastro, collected during two visits of three months. From the schoolmaster I got the greater number of grammatical forms; the pronunciation, with which this paper is most largely concerned, I was able to note from the lips of the men employed at the excavation.

Spelling.—My principle has been to write the vowels in the usual way, but to express the consonants as phonetically as possible. In no other way is it possible to give the local pronunciations. Where however I quote from a literary source, I preserve the spelling of the original, and in the same way when a dialect word is explained or illustrated by its corresponding literary form, the standard spelling is used.

The modifications of the usual Greek alphabet used are these :—

(1) The voiced stops are written g, g′, d, b.

(2) The palatals are distinguished from the gutturals by the usual dash, writing k′, g′, χ′, γ′.

(3) The sibilant, pronounced with the blade of the tongue, I have written š, the corresponding voiced sound ž. c represents the fricative sound ts, č (the English ch) the fricative tš. The corresponding voiced sounds are written j and ǰ (the English j).

(4) A nasal followed by an original guttural I have in all cases written n, for the sake of simplicity not marking the change in the sound caused by the occasional palatalizing of the guttural. To have used the usual

γ would have been to sacrifice consistency, and ν would have led to such spellings as ἀνjό(ν, ἄνg′ελος, which, as the words are never spelt with ν, seem worse than ἀnjό(ν and ἄng′ελος.

ḍ is a cerebral sound heard at Voládha and Mesochória, where λλ, and sometimes λ, are pronounced λḍ; *e.g.* ἄλḍος, V. σčύλḍος, *dog*, Mes. This is not heard at Menités, but the word ἀνεχουρdί^{d}ζω (= ἀνακατόνω), I got at Elymbos, is probably connected with this phenomenon, and to be written ἀνεκουρḍί^{d}ζω, being related to κῶλον and the adverb ἐξανάκωλα, *upside-down*.

^{τ}σ denotes the Karpathian pronunciation of σσ, which is s preceded by a slight t-sound; ζ in the same way is pronounced, and here written, ^{d}ζ. Both these pronunciations are noticed by Chaviarás, who writes τσ, τζ (*Z. A. passim*); *e.g.* ῥήητσαν, τζωντανούς, and the sound of σσ by Ross, *Reisen auf den Griech. Inseln*, III, p. 174, who writes, 'Auf Karpathos bemerkte ich auch die Aussprache τέτσαρες, τέτσαρα, statt τέσσαρες, τέσσαρα.' Beaudouin (*Bull. de Corr. Hell.*) notes this sound of ζ, and for the σσ, which he did not hear, refers to Deville, *Étude du dial. tzaconien*, p. 84.

z is used, with the value of the ordinary modern ζ, to express the voicing of final ς before a voiced initial consonant which, as generally in modern Greek, occurs in these dialects.

Voiceless sounds are occasionally voiced, apparently always just before the accent (cf. Verner's law in Teutonic). I noted from Voládha τουρcιjή (τουρκική), cυργ′ajή (κυριακή), τὸπ παbά (τὸν πᾶπα).

Accent.—As the circumflex has now no distinction from the grave or the acute, it is not used in these notes in writing dialect-words.

With regard to the grave and the acute, I have used the grave to mark the secondary accent that occurs in long words and in word-groups formed with enclitics and proclitics.[1] To mark a full-stress the acute is always used. Thus ἤδωκα, ἤδωκά του το, ἐχὰσαμέ da, *we have lost them*, ἔρχου-μὲστανε. ἤρθα. P.

[1] Some words, traditionally written with an accent, are really proclitic. This is especially true of the article, which, accented and unaccented forms alike, bears at most a secondary stress. Its proclitic nature appears also in the fact that in Northern Greek its vowel shares the weakening of unaccented vowels in general. *E.g.* from Velvendos we have for ὁ, τὸν, τοῦ, τῆς, respectively οὔ, τοὺν, τ, τς. From lack of certainty as to its proper stress I have however accented it as usual, merely avoiding the meaningless circumflex.

At Elymbos the imparisyllabic oxytone neuters in *-ί*, like *αὐτί*, keep the accent on the *ι* throughout the declension, instead of throwing it upon the final syllable. They thus form an exception to the general rule of modern accentuation.[1]

e.g. τὸ οὐνί, the mountain, τοὺ οὐνίου, τὰ οὐνία, τὼβ βουνίω(ν.

Paroxytones of this declension vary, *e.g. τὸ 'μμάτι, the eye, τοὺ 'μματιού*, but *τὸ λουλούκι, the dog, τοῦ λουλουκίου.*

The plural of *ὁ ἀσιλιάς*, the king, *οἱ ἀσιλέοι*, is another case of this exceptional treatment of the accent.

Change of Spirants to the corresponding stopped sounds.

I. The unvoiced spirants *χ, χ′, θ* have changed to *κ, κ′, τ* :

(*a*) After *σ* and *f* (*i.e. ευ, αυ, φ*), as usually in modern Greek, both in Karpathos and at Palaíkastro.

(*b*) After *ρ*, in Karpathos only. This is characteristic of the S.E. dialects, *e.g. ἔρκομαι.* The position after *λ* does not occur, as *λ* before a consonant changes generally in the modern dialects to *ρ*. Thus we have for *ἦλθον, ἤρτα.*

II. The voiced spirants *γ, δ.*

The tendency to change the second of a group of spirants to its corresponding stop is so strong in Karpathos, that it has affected *γ, γ , δ* as well as the usual *χ, χ′, θ.*

The sound-groups affected are *νγ, νγ′, νδ, ργ, ργ′, ρδ, γδ.* The phenomenon is not quite evenly distributed, for at Voládha only *νγ* and *νδ* are affected. About Mesochória I am uncertain ; *δ* there is apparently not touched.

Examples are :—

νγ → vg. *φεύgω*, E. Men. V. *τὰ αὐγά*, E. *βgάᵈζω, ἤβgαλα.* Men.
νγ′ → vg′. *φεύg′εις*, E. Men. (but *φεύγ′εις*, V.). *ἡ αὐg′ή*, E. *ἡ αὐϳή*, Men. *θἀβg′ῄς, thou wilt go out*, Men.
νδ → vd. *τὸ ῥαβdί*, E. Men. V. *ἡ ἀβdέλλα*, E. *ἐβdομά*, E. V.
ργ → ρg. *ἀργάτης*, E. Men. *ἀργαστήρι*, E. *ἀργώ*, E. (but *ἀργώ*, V.).

[1] The rule, with a number of other places where it is not observed, is given by Thumb, *Hdb. der Neugr. Volkssprache*, § 11. 'Alle Wörter, bei denen ein ursprünglich betontes i oder e dem die Schlusssilbe bildenden Vocale vorausgeht, erhalten Endbetonung.'

ργ′ → ρg′. *ἀμουρg′είος*, E. *Γ′εώρ̆ι̯ος*, Men. *ἀρg′ήσω*, E. *ἀρ̆ήσω*, Men. (but *ἀργ′είς*, V.).

ρδ → ρd. *βάρδα*! E. *τὸ σκόρδο(ν*, E. *τὸ κάρδαμο(ν*, Men. *ἡ πέρδικα*, Men. (but *πέρδικα*, V.).

Note.—The appearance of ǰ for g′ at Menités will be noticed in the next section.

The group γδ appears in verbs that are compounded with *ἐκ*. At Menités at all events this group becomes γd: e.g. *ἐγdέρω*, aor. *ἤγdαρα*.

Chaviarás for the group that is normally νγ usually writes νκ. See his contributions to *Z.A. passim*.

Examples are *ἐούλευκα* (=*ἐδούλευα*), *μισεύκω*, *εὔκα* (impv. aor. sg. of *βγαίνω*), etc. That the sound is however really a g is supported by Bent's observation of it. See *J.H.S.* vi. p. 242.

Treatment of κ′, g′, χ′, γ′.—The change of the palatalized gutturals of mod. Greek, κ′, g′, χ′, γ′, into c or č, j or ǰ, š, ž, is found in various degrees in these dialects.

In Elymbos it does not appear. At Mesochória and Voládha it affects only κ′ and g′, which at the former are pronounced č and ǰ, whilst σκ′ is pronounced σč. At Voládha the pronunciation is c, j, and σκ′ is unchanged.

At Menités χ′ also is affected, and the changes are κ′, (σκ′), g′, χ′ to č, (š), ǰ, š. Lastly, at Palaíkastro all four are changed, and we have κ′, (σκ′), g′, χ′, γ′ pronounced č, (sč), ǰ, š, ž.

The most interesting points are the variations in the treatment of σκ′, which is treated in the same way whether it represents original σκ or σχ, and the increasing range of the phenomenon in Karpathos as one gets further south and closer to Crete, where it occurs in its most fully developed form. The intermediate pronunciation struck me particularly at Mesochória, for to hear from the same mouth pronunciations like *čaí* and *ἀνάn̆ǰη* on the one hand and *γ′υρί[d]ζω* and *χ′ίλ̆ι̯α* on the other sounded very strange to an ear accustomed to the thoroughgoing Cretan system.[1] The change is sometimes prevented by analogy. Examples follow.

κ′. *caí*, *cairός*, V. *čaí*, *čairός*, Mes. Men. P. *λάccοι*, *ἀρcί[d]ζει*, V. *ἀρčί[d]ζει*, Men. *ἡ εὐčή*, (=*ἡ εὐχή*), Men. P. *ἡ čοιλ̆ιά*, P.

[1] Which even inserts ž between words to fill hiatus; *e.g.* *οἱ ž ἄžοι*, *οἱ ž ἄλλοι* for *οἱ ἅγιοι*, *οἱ ἄλλοι*. Note also *žη* for *ἡ*.

It is preserved in ἔρκ′εσαι, ἔρκ′εται, V. Men., on the analogy of the other persons ἔρκομαι, ἐρκούμεστα(ν, ἔρκουτται. The č in ε͡ὔčεσαι, Men., on the other hand is very likely due to the influence of the substantive ε͡ὐčή.

σκ′. σčύλḍος, ἄσčημος, Mes. šύλος, ἄšημος. Men. σčύλος, ἄσčημος, P. But σκ′ύλḍος, ἄσκ′ημος, Παρασκ′ή, (=Παρασκευή), V.

g′. (*a*) Representing original κ. ἀnj′στρι, V. ἀnǰίστρι, Mes. Men. ἀǰίστρι, τὴ ǰοιλ̣ιά(ν. P.

(*b*) Representing original γ, preserved as a stop after a nasal. ἄnjελος, V. ἄnǰελος, Mes. Men. ἄǰελος, P. ἀnjό(ν, V. ἀǰό(ν, P. (=ἀγγεῖον).

(*c*) Representing original γ, appearing as a stop after ν, ρ. Examples—naturally from Menités only, for at V. and P. γ′ is not changed to g′ and at E. g′ is preserved,—are, Γ′ε͡ὠρǰ̣ος, ἀρǰήσω, ἡ α͡ὐǰή. The g′ is kept on the analogy of the 1st persons and the third pl. in φεύg′εις, ἤβg′ες, θἀβg′ῆς.

χ′. τὸ šέρι, τὸ μašαίρι, ἡ ψυšή, Men. P. An example of χ′ kept by analogy is ἤηχ′ες, Men. 2nd sg. impf. of γ)ήχω, I cough.

γ′. As stated above, this change does not occur in Karpathos. The examples are thus from Palaíkastro. žεμάτος ; žερόδισσα (an old woman); βžαίνω. The thoroughness of this series of changes in Crete is also shewn by the absence of cases in which κ′, etc., are preserved by analogy.

The treatment of ̣ι.—The combination of this sound with a preceding consonant is very variously treated.

I. Closer narrowing of the vocal passage and stronger breath introduce a spirantal element (cf. Sievers, *Phonetik*, § 424), and the simple ̣ι- developes into a spirant, followed or not by a glide ̣ι. It is often hard to say how far this glide is present. After voiced consonants this spirantal sound is usually treated in the same way as γ′. This change is absent from Elymbos, and this, combined with the preservation of the palatal stops, is the reason that the dialect there is described often as hard and dry.

(*a*) After ρ and β. At Voládha, where γ′ is kept, τὸ χωργ′ό(ν. At Palaíkastro, τὸ χωρžό(ν, τὰ καράβža, pronunciations corresponding to the change of γ′ to ž. Lastly, at Menités, τὸ χωρǰ̣ό(ν, τὰ καράβǰ̣α are heard,

because there γ after ρ and ν becomes the corresponding stop, and g′ changes to ǰ. The glide ̯ was very plain to hear.

(*b*) After φ the corresponding unvoiced sound is produced. Thus we have *τὰ χωράφχ′α*, V., *τὰ χωράφša*, P., and *τὰ χωράψčι̯α*, Men. The plural of *ἀέρφι*, *brother*, at Menités is *ἀέρčι̯α*, the φ having been dropped out of the group ρφč. It has left a trace of itself in the fact that the ρ is followed by č and not ǰ; cf. *τὰ χωρǰι̯ά*.

(*c*) After π. At Palaíkastro πš results, the treatment being the same as after φ; *e.g.* *πšός*; *σουπšά* (=*σηπία*), *πšάνω*. In Karpathos the treatment is peculiar. Examples are, *μ^{b}ǰός* (=*ποῖος*); *θὰ μ^{b}ǰάσω*, future of *πιάνω*, Men. *μjός*, *νερὸ νὰ μjώ*, *water for me to drink*, V. This was the women's pronunciation; the schoolmaster pronounced the spirantal element of the fricative j with the blade rather than with the point of the tongue, and thus pronounced *ποῖος* as *μǰός*. The explanation of these forms is to be sought in the prosthetic nasal. So many forms end in ν that the nasal, through the Greek method of dividing syllables, gets attached to the following word, and finally never leaves it. Thus we have *νῶμος*, *νᾰ́δης*, etc. And this is frequent before π. Jannaris (Ἄισμ. Κρητ.) gives as Cretan *μπιστόλα*, *μποντικός*, besides the common *μπλι̯ό*. *Μπιστός* I noticed at Menités. The nasal causes the π to be voiced, and from the ̯ a spirantal element is produced, which with the preceding sounds appears in the fricative j or ǰ, and gives **μbjός* or **μbǰός*. j or ǰ appears according to the pronunciation of g′ as one or the other; the Voládha schoolmaster's *μǰός* corresponded to his pronunciation of κ′, g′ as č, ǰ, just as the women's *μjός* to their c, j. **μbjός* and *μbǰός* are then lightened to *μjός* and *μ^{b}ǰός*, the b sound in the latter being extremely slight, just as **ἀέρφčι̯α* above is lightened to *ἀέρčι̯α*.

(*d*) After b. For Karpathos I have no examples. At Palaíkastro it is analogous to that after *β*, *φ*, and *π*; *e.g.* *ἂνε bžάνει* (*ἂν πιάνει*).

(*e*) This strengthening occurred at Menités and still more at Voládha after certain other consonants: *e.g.* *σπίδγ′α* (pl. of *σπίτι*), *λαδγ′ού* (gen. of *λᾰ́ι*, *oil*), *γ′αλγ′ά* (pl. of *γυαλί*), V.; *τραπέ^{d}ζγ′α*, *παιδγ′ά*, Men.

II. *σι̯-* is variously treated.

(*a*) The ̯ is dropped; this occurs at Palaíkastro and Elymbos: *e.g.*

νησά (pl. of *νησί*), *σάζω* (*ἰσιάζω, I tidy*), *ἴσα ἴσα, steady!* P., and *δι̯ακόσα γρόσα, σώπα, hush!* E.

(*b*) *σι̯* becomes *ši̯* or *š*. This is heard at Menités. The glide *ι̯* was only audible when the following syllable was not accented: *e.g. νηšά*, *šά*^{d}*ζω*, but *φέši̯α, γρόši̯α, ἄκši̯ος* (= *ἄξιος*).

(*c*) The group is unaltered or the *ι̯* strengthened to *γ′*. Thus at V. where the pl. of *γρόσι* is *γρόσι̯α* or more commonly *γρόσγ′α*.

III. So also *τι̯-* is variously treated. At Elymbos it is unaltered, as at Palaíkastro, where I never heard the usual Cretan *θι̯*. At Menités d*ι̯* is heard, *e.g. σπίdι̯α*, and at Voládha and Mesochória *σπίδγ′α*. Manolakákis bears witness to the variability of this sound, by writing sometimes d*ι̯-*, sometimes *δι̯-*.

IV. The *ν* usually inserted between *μ* and *ι̯* I verified at Palaíkastro and Menités.

V. d*ι̯-* sounds dǰ-: *e.g. τὰ πουλdǰά*, pl. of *τὸ πουλdί*. V.

The Nasals.—Here both the Karpathian and the Palaíkastro dialects present variations from the usual modern Greek standard.

Modern Greek inherited nasals in six classes of positions.

(*a*) Before a vowel. (*b*) Before *λ, μ, ν, ρ, σ*, or *ζ*. (*c*) Before *β, γ*, or *δ*. (*d*) Before *π*(*ψ*), *κ*(*ξ*), or *τ*. (*e*) Before *φ, χ*, or *θ*. (*f*) At the end of a word before a pause, complete or partial, that is, a word not closely bound to its successor.

A. *In external combination.*—The normal rule is that in cases (*b*), (*c*), (*e*), and (*f*) the nasal is dropped. In cases (*a*) and (*d*) it is preserved, in the latter causing the following consonant to be voiced.

From this the dialect at Palaíkastro differs only in case (*d*), where also it drops the nasal, which leaves as its only trace the voicing of the initial: *e.g. τὸ* ba*πά* (acc. of *ὁ παπάς*); *τὸ* gábo(*ν* (acc. of *ὁ κάβος, the field*); *τὴ* ǰοιλι̯ά(*ν* (acc. of. *ἡ ċοιλι̯ά*); *ἠδὼκαμέ* dzι *το, we gave it to her.*

The enclitic possessive pronouns of the 3rd person, which normally begin with *τ*, are thus voiced after all cases of the noun except those that end in *ς*. The reason is that cases ending in *ν*, after which the voicing was in place, have been sufficiently numerous to cause voicing by analogy wherever it was not prevented by the case ending in *ς*. Thus, by the side

of the etymologically justified τὴ μάνα dov (3 m.s.), dzι (3 f.s.), dos[1] (3 pl.), we have ἡ μάνα dov, dzι, dos, and nom. pls. and gen. sgs. follow the same rule : *e.g.* τὰ παιδι̯ά dov, τοὺ παιδι̯ού dov.

This strayed ν, known usually only by its results, I have occasionally heard slightly sounded in verses.

The divergence of Karpathian is more marked. In cases (*a*) and (*f*) the treatment is normal, but in all other cases, *i.e.* whenever the following word begins with a consonant, the nasal is assimilated and the consonant is doubled. It is a striking peculiarity that initial π, κ, τ are not voiced under these circumstances.[2] The syllable-division is, as Sievers puts it, inside the consonant, which distinctly ends the first and then begins the second syllable. If the consonant is a stop there is not a double explosion, but only a longer interval than usual between the closure of the voice-passage and the explosion. So with a nasal the closure of the mouth-passage lasts longer than with the single letter. If the initial is c or č, the syllable-division is in the stopped element with which the fricative sound begins, and not in its spirantal part. Thus what at Elymbos is pronounced τὸκ' κ'αιρό(ν, sounds at Voládha τὸτ cαιρό(ν, and at Menités τὸτ čαιρό(ν. The syllable-division falls between the closure and the explosion of the stopped element of the fricative, just as with the original palatal sound, its position being naturally unaffected by the modification of the end of the sound produced by the influence of the following vowel.

If the initial is a spirant or liquid it is simply prolonged, and divided by the syllable-division. If, however, the initial is σ the resultant sound is pronounced as if beginning with a distinct but slight τ, as -σσ- is always pronounced in Karpathos. In the case of ζ, pronounced ^{d}ζ, I could hear no difference between the simple sound and the sound that might be supposed to be doubled. The ^{d}ζ-sounds in ší^{d}ζω, Men., and τὸ ^{d}ζυό(ν (acc. of ὁ ^{d}ζυός, *the yoke*), sounded just alike.

B. *In internal combination.*—The normal rule here is that in (*a*) the nasal is kept ; in (*b*) μν is kept, but μμ, νν are pronounced as single ; in (*c*) the nasal is kept and β, γ, δ preserved as stops b, g, d ; in (*d*) the nasal is kept and π(ψ), κ(ξ), τ are voiced ; in (*e*) the nasal is lost, leaving no trace.

[1] Connected with this form dos is the gen. pl. of ἄνδρας, τὼν ἀdρός, which is heard not only at Palaíkastro but elsewhere in Crete. ζυναικός also occurs, but is unusual.

[2] Although the peculiar pronunciation of πι̯- noticed above is only to be explained by supposing that the normal rule acts here in external as well as in internal combination.

The divergence of these dialects is in the same general direction as in external combination.

At Palaíkastro the only difference is that in cases (*c*) and (*d*) the nasal is lost, or but very slightly heard, before the voiced consonant. *e.g.* (*c*) κολυβώ *swim*, ἄǰελος, ἔgονας, δεδρό(ν, ἔδεκα. (*d*) πέβω, λάβα *lamp*, ἀǰίστρι, ἀgαλι̯άζω, κοδά *near*. A man trying to speak well will sound the nasal, which is in this way put into loan words where it has no right. Thus *fabbrica* is regularly pronounced φάμβρικα. ζιμβίλι, *a basket*, is another example.

The divergences in Karpathian are:—

In case (*b*) μμ, νν are pronounced lengthened.

In case (*d*), whilst the normal rule is generally followed, there are traces of the peculiarity observed in external combination. These are (1) in the endings of the 3rd person pl. pres. and impf. pass. (or dep.). These endings are -ττται, -ττο(ν, *e.g.* ἔρκουτται, ἤρκουττο(ν. They are clearly descendants from the classical endings -νται, -ντο, with the ν assimilated to the τ. The analogy of the 3rd pers. sg. has probably here preserved the τ in the plural, and caused the rule for external combination to come into play. Thus ἔρκεται and ἤρκετο(ν will have produced ἔρκουτται and ἤρκουττο(ν, in preference to *ἔρκουνδαι and *ἤρκουνδο(ν.

The influence of the numbers upon one another may be paralleled from Palaíkastro, where the d of the 3rd pl. impf. dep. has transferred itself to the singular, and the pl. ἤρχουδανε has produced the sg. ἤρχουδονε. The *a* of ἤρχουδανε seems to come from ἤσανε, just as the ending of ἤρχουδονε is the same as that of the sg. ἤτονε. ἤτανε is not used at Palaíkastro.

(2) Other cases are seen in certain isolated words. At Volâdha ἐππορώ is used for ἐμπορῶ. From *Z.A.* come ἐάκκασεν (ἐδάγκασε), λεβέττη, φρακκάκι, *a young Frank*, ἀφέττης, πέττε, ἤττ' (ἴντα=τί), κόττα-ριν, τὴβ βάττα της (contrast τὴβ βάντα). No consistency is observed, and the spellings ντ, γκ are commoner. I could find no case in *Z.A.* of ππ for μπ.

φεκκάρι, which occurs in *Z.A.* several times, is worthy of special notice, because the κκ represents not γκ, but γγ. So too χαττάκι̯α, *Z.A.* p. 276, for χανδάκι̯α.

In case (*e*) the nasal, instead of being lost altogether, leaves its usual trace behind in the form of the doubled letter: *e.g.* νύφφη, ἄθθρωπος.

Dropping of γ, β, δ.—It is a notable characteristic of the Karpathian dialect, which it possesses as a member of the south-east dialect-group, that the voiced spirants, γ, β, δ, are regularly dropped between vowels. The local variations are very slight, and depend almost entirely on the treatment of the semi-vowel ι̯. The principle that intervocalic γ, β, δ, are dropped remains the same everywhere. Examples are:—

τραούϊ (=τραγοῦδι), πηάϊ (=πηγάδι), πηαίνω (πηγαίνω), πρόατα (=πρόβατα).

The dropping takes place not only in the middle of a word, but also initially, if the previous word be in sufficiently close connexion and end in a vowel. If the word stands after a pause in the flow of the sentence or at the beginning of a sentence, dropping is usual, but inconsistencies occur. Thus the negative at the beginning of a sentence is always ἔν, and not δέν, but ὅς and βός are used indifferently for the imperative of the verb γ)ίω, *I give.* The rule is shewn by such a sentence as ἂσταξέ το καλά, *take hold of it well*, where ἄσταξε is the aor. impv. of βαστῶ.

These laws bring about the existence of double forms of words beginning with these letters, one with and one without the initial; *e.g. I hold him* is either τὸβ βαστώ, or ἀστώ το, and from γ)ίνομαι come both the future θὰ ἐνώ and the aor. subj. in the phrase νὰ μὴγ' γ'ενῄς.

The following declensions exhibit this clearly:—

β)ασιλι̯άς. ὁ ἀσιλι̯άς, τὸβ βασιλι̯ά, τοὺ ἀσιλι̯ά,
οἱ ἀσιλι̯άες, τοὺz βασιλι̯άες, τὼβ βασιλι̯άω(ν.

The plural forms are those of the imparisyllabic plural in -άδες, with the δ dropped.

γ)είτονας. ὁ εἴτονας, τὸγ' γ'είτονα, τοὺ εἰτόνου,
οἱ εἰτόνοι, τοὺz γ'ειτόνους, τὼγ γ'ειτόνω(ν.

The doubling of γ', however, is not very clear.

γ)άμος. ὁ ἄμος, τὸγ γάμο(ν, τοὺ ἄμου, etc.
δ)άσκαλος. ὁ ἄσκαλος, τὸδ δάσκαλο(ν, τοὺ ἀσκάλου, etc.

This paradigm of δάσκαλος is from Elymbos. By a curious inconsistency I was given at Voládha ὁ δάσκαλος, but τοὺ ἀσκάλου. But, as will be seen below, words beginning with δ followed by a vowel are hardly to be found, and the connexion of even this word with education has probably kept it out of the full stream of dialectic peculiarities.

The treatment of ̯ varies. At Elymbos, where we have seen that it is not developed to a spirant, it is, in correspondence with this fact, treated as a vowel, and dropping takes place before it. Where it has become spirantal there is no dropping : *e.g.* στολί̯α, E., plural of στολί (for στολίδι, *array*), but στολίδγ'α, παιδγ'ά, Men.

Words beginning with δια- are interesting. At Elymbos the δ is dropped, and the word always begins with γ' ; *e.g.* ἡ γ'άξι (=ἡ τάξις), τὴγ' γ'άξι(ν, τάγ' γ'ανεύγ'εις ; (=τί ἑτοιμάζεις ; the interrogative is τάν as well as τί). It would seem that the ̯ is vocalic enough to cause δ to drop, but spirantal enough to absorb the ν. Where, however, ̯ becomes spirantal, the δ is kept, and answering to παιδγ'ά, we have at Menités ἡ δγ'άξι, τὴδ δγ'άξι(ν. Further by a false analogy with words beginning with δια-, at Menités ὁ ἰατρός is pronounced ὁ δγ'ατρός, with acc. τὸδ δγ'ατρό(ν. A line in *Z.A.* has this form, μήε δ̯ατροὶ δ̯ατρεύγουσι. This δ is, however, not usual in such words, and by the side of ὁ δγ'ατρός we have τὸ γ'αλί, *the glass*, and ἡ γ'ορτή, τὴγ' γ'ορτή(ν. The only other instance I could find in *Z.A.* is τὸ δ̯ασιμάκι, *jasmine*.

The existence and frequency of the forms with the dropped initial has led not infrequently to the use of an etymologically wrong initial when a preceding final ς or ν demands the presence of an initial. Words thus appear under strange disguises. The following lists of all the examples I have been able to collect are classed according to the six possible changes, *viz.* (1) δ → β, (2) δ → γ, (3) γ → β, (4) β → γ, (5) β → δ, (6) γ → δ.

1. β substituted for δ.

β)ακρύ[d]ζω, β)άκρυο(ν. γ'ατίαβ βακρύ[d]ζεις ; Men. *Why art thou weeping ?* [τία(ν is a form of the interrogative.]

τὰ ἄκρυα, for which inconsistently τὰ βάκρυα is used at Elymbos.

β)ακώ, *I bite* ; from *Z.A.* comes βάκαμμα, δάγκαμα. I noted also ὁ šύλος βακά̯, but, μή με ἀκάσῃ ὁ šύλος, Men.

βακοῦσι(ν. Καρπ. p. 247.

β)ανείζει. Καρπ. p. 230, for δανείζει.

βασομένον=τὸ σπαρτὸν ὅταν στηρίζεται ἐν τῷ στελέχει του, δάσος πεπυκνομένον. Καρπ. p. 184. The identity with δασόνω, δασομένον is clear.

β)ασοτή. Καρπ. p. 153. A place-name, 'the thickets,' from δασόνω, *to be thick with wood*.

β)άχτυλας, E. β)αχτύλι, Men. *Finger.* The declensions run :—

ὁ ἄχτυλας, τὸβ βάχτυλα, τοὺ ἀχτύλου.

οἱ ἀχτύλοι, τοὺz βαχτύλους, τὼβ βαχτύλω(ν.

and τὸ ἀχτύλι, τοὺ ἀχτυλγ'ού.

τὰ ἀχτύλγ'α, τὼβ βαχτυλγ'ώ(ν.

β)ίω, *I give.* (δίδω). ἔτ σουβ βίω τίποτε. E. *I am giving thee nothing.* Impv. ὅς or βός. Fut. θὰ ὥκω. For this word see also the changes of δ to γ.

β)ουλιά, β)ουλεύgω. τί οὐλιάκ κάνεις ; E. *What work art thou doing ?* ἔβ βουλεύg'ει τὸ ῥολόιμ μου. E. *My watch is not going.* τίαβ βουλεύγ'εις ; V.

2. γ substituted for δ. This is specially noted by Beaudouin, *B.C.H.* iv. p. 366.

δαφνὸν ἢ γαφνόν. τὸ ἔχον ταινίας χρώματος δάφνης. *Z.A.*

γ')ειπνῶ. In the line, Πριχοῦ εἰπνήσῃ, γείπνα τη, γείπνα καὶ εἴπνα μού τη. *Z.A.* p. 294.

γ')είχνω.

γ')έν. ἐγιὼ φαὶ γὲθ θέλω. *Z.A.* p. 283. 2nd decl. neuters in -ι have had a final ν added, which accounts for the initial here. ἐγιὼ γαμπρὸ γὲθ θέλω. *Z.A.* p. 283.

γ')ενδρό(ν. τὸ ἐνδρό(ν, τὰ ἐνδρά, but gen. pl. τὼγ' γ'ενδρώ(ν.

γ)έσε, aor. impv. from δένω. *Z.A.* p. 312.

γεμένα, participle from the same. Καρπ. p. 254.

γ')ευτέρα. *Monday.* ἡ εὐτέρα, τὴγ' γ'ευτέρα(ν.

γ')ευτερώλις. *July.* ὁ εὐτερώλις. τὸγ' γ'ευτερώλι. In Crete also Πρωτώλις and Δευτερώλις are the popular names for June and July.

γήσαλον(τὸ), πεπηγός. Καρπ. p. 186. A connexion with δένω seems certain.

γητίνα (ἡ) = ἀμφορεύς. Καρπ. p. 186. Though I have not found the word elsewhere, yet from its meaning the first syllable must almost certainly be the γι (= δι) of γ'ιχάλι, γισίκλα, γίπλαις below.

γικάζουνται = δικάζουνται. *B.C.H.* iv. p. 366. Quoted from Manolakákis, Δωρικὸν ψήφισμα Καρπάθου. 1878.

Γ')ιμίτρις. *Demetrius.* ὁ Ἰμίτρις. τὸγ' Γ'ιμίτρι.

γίπλαις. *Z.A.* p. 297.

γισίκλα. See *Z.A.* note on p. 294: *σικλί = ξύλινον δοχεῖον χωροῦν δύο ὀκάδες, γισίκλα τὸ διπλοῦν = 4*.

γ')ιχάλι. The, usually three-pronged, fork used as a winnowing shovel, for throwing the threshed grain up into the air to winnow it. From its name it must originally have had two tines only. *τὸ ἰχάλι*, but, *βόz μου ἕναγ' γ'ιχάλι. Give me a winnowing-fork.*

γ)ίχτυο(ν. τὸ ἴχτυο(ν, τὰ ἴχτυα, but *τὼγ' γ'ιχτυώ(ν*.

γ)ίω, I give. The present of this verb I heard at Voládha as *γ)ίω*, whilst its impv. was *βός* or *ὅς*: *see also β)ίω* above.

γύναμις = δύναμις. *B.C.H.* iv. p. 366.

γυνατά, for *δυνατά*. Καρπ. p. 231.

γ)ώμα, roof. τὸ ὦμα, gen. pl. *τὼγ γωμάτω(ν*.

3. *β* substituted for *γ*.

Βαζωτή· *τὸ ἐπίθετον ἀπαντᾶται συνήθως με τὴν λέξιν φοῦντα = ἀνθοδέσμη*. *Z.A.* p. 331. From the verb *γαζόνω*.

β)άλα, milk. τὸ ἅλα, τοὺ ἀλάτου, but *ἔχεις βάλα*; E.

βαλατσίνα (; *γάλα*) *εἶδος ἀκάθθας γαλακτοῦχος*. *Z.A.* p. 32. This is plainly a derivative of the last word.

βάρδα. Interjection; *beware! πρόσεχε*. Italian *guarda*. *βάρδιαις*, Καρπ. p. 251. The form with *β* is, however, general in mod. Greek.

βαριά ἢ γαριὰ (*ἡ*) *= ἀκαθαρσία*. Καρπ. p. 184. *Z.A.* p. 32. The Cretan *γαριόνω* (pronounced *γαρžόνω*), meaning *λερόνω, I soil*, shews that the form with *γ* is the normal one.

β)αστέρα ἢ γαστέρα = ἡ γνωστὴ πιτύα, ἡ ἐκ τῆς γαστρὸς τοῦ γαλακτοτρεφουμένου ἀρνίου ἢ ἐριφίου. Καρπ. p. 184.

συββονατίζω. I kneel down. συββονατίζ' ὁ κάλαμος. *Z.A.* p. 302.

γόνος ἢ βόνος = ἡ γονιμοποίησις, προσαύξησις τῶν μελισσῶν. Καρπ. p. 187.

βονιοῦς της. Καρπ. p. 266. *i.e. γονεῖς*.

γοῦλα ἢ βοῦλα. στόμα. *Z.A.* p. 332.

βουνέλα ἢ γ)ουνέλα (*ἡ*) *= ἐπενδύτης* (*ἡ γοῦννα*), Καρπ. p. 185. *Βουνέλλα*. *Z.A.* glossary.

Β)*ούρναις*, (*ἡ*), (*κρήνη*). Καρπ. p. 153. Being the name of a spring its identity with *γούρνα*, *a basin*, is clear.

βοργόνα. *Γοργώ*. *Z.A.* glossary.

4. γ substituted for β.

γ)άφω, *I dye*. aor. *ἤαψα*. *ἤτογ γαμμένο(ν*, *it was dyed*.

Γεργατσούλη (*τοῦ*). Καρπ. p. 154. A place-name. Cf. *βεργί*, *a wand*.

γ')ήχας, *ὁ*, *a cough*; acc. *τὸγ' γ'ήχα*.

γ')ήχω, *I cough*. *μὴγ' γ'ήχ'ῃς*, Men.

γίγλα for *βίγλα*, *watch*, is given by Meyer, *Neugr. Studien*, as Karpathian. Also *Z.A.* p. 321.

γυζάντι καὶ γυζαντάρικον· τὸ γαλακτούμενον. *Z.A.* p. 321. Also *γύζια* for *βύζια*, *breasts*. For the optional β cf. *β)υζανταροῦ ἢ β)αζανταροῦ· γαλακτοφόρος* *Z.A.* p. 329; the latter of these two forms suggests a confusion with *βάλα*=*γάλα*.

γυστερέα (*ἡ*)=*πάθησις ἐν δαιμονικῇ συνεργείᾳ ὑπὸ νεραϊδων*. Καρπ. p. 188. *γυστιριά* (*ἐξ οὗ ἐϊστιρίσθη-ισμένος*), *ἐνέργεια δαιμονίου*. *Z.A.* p. 321. This is clearly the Karpathian form of *βιστηριά*, a word of the same meaning discussed by B. Schmidt, *Volksleben der Neugriechen*, p. 98, and given by him as Cretan. See G. Meyer, *Neugr. Studien*, ii. p. 79, iv. p. 19, for its derivation from It. *investire*.

γυτσίλα (*ἡ*)=*ὁ ἀρπακτικὸς γύψ*. Καρπ. p. 188. The Cretan *βυτσίλα*, with the same meaning, shews that the word outside the area of these changed initials begins with β.

5. δ substituted for β is never found.

6. δ substituted for γ. I have only found one instance, the verb *γεύομαι*, *Z.A.* p. 286, *νὰ δευτοῦμε* and *νὰ δευτῇς*.

These changes are thus confined to δ → β, δ → γ, γ → β and β → γ. The one exception is the change γ → d in *γεύομαι*, where the δ is moreover intervocalic. As the normal form is *γευτοῦμε*, this so exceptional form is almost certainly an example of the phenomenon exhibited by the pronunciation of *ὁ ἰατρός* as *ὁ δγ'ατρός*, and a more careful orthography would have written a γ' after the δ.

In looking at the lists it is seen that δ changes either to β or γ, for

where we find an example given in such a shape as *e.g.* δάφνον ἢ γάφνον, we must understand the unusual word to be the true dialectic form. From the number of examples, and the difficulty I had in getting a paradigm of a word shewing δ just dropped and then doubled, having finally to be content with the doubtful example of δάσκαλος, it seems that the substitution of β or γ for δ is a regular rule. But on what principle is one or the other substitution made? If we except γάφνον and γῶμα, we find that before an e or i sound γ′ is substituted, and β before an a, o, or u sound, *e.g.* β)ακρύ^{d}ζω but γ′ενδρό(ν. The only other exception is the present of the verb for 'to give,' which is sometimes βίω, side by side with the γ′ίω demanded by this principle. Both forms are quotable also from *Z.A.* The form βίω, however, is clearly on the analogy of the imperative, which is, as according to the principle it should be, βός.

When we come to the examples of the changes β → γ, γ → β, it is seen that, with the single exception of γ)άφω, they are all in the same direction as the substitutions for δ, *i.e.* for γ before an a, o, or u sound β is substituted, whilst before an e or i sound β gives way to γ′. Although the existence of such a word as γ)άμος, and the exceptions to the above principles, γ)άφνον, γ)ῶμα and γ)άφω, shew that the words beginning with γ at all events have not fully arranged themselves into two categories, one beginning with γ′ε, etc., and the other with βα, etc., yet the state of the words beginning with δ and the great majority of the other examples shew clearly that a tendency to form two such categories out of the words beginning with β, γ, δ followed by a vowel is an active principle in the Karpathian dialect, and that it has practically done away with the existence of words beginning with δ followed by a vowel.

If this tendency were carried right through, we should find not only no words beginning with δ followed by a vowel, but also no words beginning normally with γ followed by a, o, u, or with β followed by i, e, left unaltered. The written evidence on such points is hard to use, because of its inconsistencies, and the tendency to write normal rather than truly dialectic forms. The glossaries, however, published in Καρπ. and *Z.A.* agree with the lists given above in shewing less objection to γ followed by a, o, u, than to β followed by i, e. Thus, whilst the lists above give no substitutions resulting in β followed by i, e, and three (γάφνον, γῶμα, γάφω) resulting in γ followed by a, o, (u), in the remaining part of the glossaries against some eighteen words left with the original γ before a, o, u, I only

find, except two foreign proper names, *βεργί* and its compounds always spelt with the *β*, and, in face of the proper name *Γεργατσούλη* quoted above, it is likely that in these words also a *γ* is sounded, and that it was the author's knowledge of their literary form that made him write them with what he would regard as the correct initial. The idea that dialectic peculiarities are simply blunders, and that dialects have no grammar, is unfortunately widely diffused. The *β* of *β)υζανταροῦ* above is due to the word being halfway between *β)αζανταροῦ*, with its connexion with *β)άλα*, (=*γάλα*), and a form *γ)υζανταροῦ*, connected with *γ)ύζια* (=*βύζια*).

It would thus seem that this rearrangement of initials is carried through most completely in the case of words beginning normally with *δ* and *β*, and less thoroughly with words beginning with *γ*. Here I must leave the subject. Into the interesting phonetic question of the mechanism of the influence of the vowel upon the foregoing consonant I cannot enter.

Certain points worth noticing arise when the consonant is dropped in the middle of the word.

The commonness of the diminutive termination *-δι* leads to the occasional insertion of *δ* in the gen. sg. and in the plural cases of 2nd decl. neuters in *-ι*, where another consonant is required etymologically. Thus at Voládha we meet with *τὸ καρᾶι*, *the ship* (for *καράβι*), *τοὺ καραδγ'ού*, *τὰ καράδγ'α* instead of **καραβγ'ού*, *etc.*, the forms with *δ* instead of *β* being shaped on such a common model as *τὸ πηᾶι* (for *πηγάδι*), gen. *τοὺ πηαδγ'ού*. At Menités I found the etymologically correct *καραβ̆ι̯ού*, *καρά-β̆ι̯α*. Another example is *τὸ ῥολόι*, *τοὺ ῥολοδγ'ού*, *τὰ ῥολόδγ'α*, V. Here again the correct form is to be heard at Menités, though with a metathesis, *τὸ λορόι*, *τοὺ λορογ'ού*.

With regard to the hiatus left by the dropped consonant I have the following notes from Menités. Sometimes, especially with *ι+ι*, the vowels run together: *e.g. νί*, *ploughshare* (so pronounced at Elymbos also), *νιδγ'ού*, *νίδγ'α*; *ἀπί*, *pear*, *ἀπιδγ'ού*, *ἀπίδγ'α* (*νί* and *ἀπί* are for *νίδι* and *ἀπίδι*, the position of the accent being known from the plural form); *Παρασκ'ή*, for *Παρασκευή*, *Friday*. On the other hand the two *a*s in *δγ'αά*[d]*ζω*, *I read*, were fairly distinct, and the placing of the accent on the second of them could be heard as different from the case of the aorist *ἐδγ'άασα*, where the accent is on the first *a*.

The Verb.—To give a full account of the verbal system would be too

much, but I hope that the notes below touch most of the more important points.

The syllabic augment both in Karpathos and at Palaíkastro is ἠ- when accented, ἐ- when unaccented. This has been already remarked for Karpathos by Beaudouin (*op. cit.*). Thus the impf. of φεύγω is ἤφευγα in the sg. but ἐφεύγαμε(ν in the plural.

The augment of verbs beginning with vowels is more complicated. At Palaíkastro I noted ἀγάπησα, ἀgάλι̯ασα, ἀπόβγαλα; in Karpathos ἐπόθανε and ἐπό(β)αλε.

The most important points with regard to the terminations are these :—

A. *The Active.*—Apart from the impf. of contracta, which are given below in full, the 3rd pl. is the chief point. At Palaíkastro it ends always[1] in -νε, but in Karpathos the old primary ending -σι(ν is the rule in both primary and historic tenses of the indicative, although -(ν is certainly sometimes used in the subjunctive, and is admitted as an alternative in the indicative at Elymbos. Examples are πατούσι(ν, K. πατούνε, P. also πατού(ν, E. From φεύγω, aorist ἐφύασι(ν, K. ἐφύγανε, P., and from Elymbos ἐφύα(ν. The aorist subj. of φεύγω is νὰ φύου(ν, K. νὰ φύγουνε, P.

Endings in -νε are very popular in Crete. Apart from the examples which the passive verb shews, at Palaíkastro one hears in the 1st pl. λέμενε, κλαίμενε from λέγω and κλαίω. Sometimes the -νε is added to the 3rd sing. historic and such forms as ἔβρεšενε, εἴšενε (from βρέχω and ἔχω) result.

The imperfect of the contracted verbs, which I give in full because of its great variety of forms, runs as follows :—

(*a*) -άω verbs.

The examples are from γελώ and σπώ: ἐέλου(ν, ἐέλας, ἐέλα(ν, ἐελούμε(ν, ἐελάτε, ἐέλου(ν, or more usually ἐελούσα(ν. This is from Elymbos. The southern villages only differ in not using ἐέλου(ν in the 3rd pl. The forms at Palaíkastro are :—ἤσπου(ν or ἤσπουνα ἤσπας, ἤσπα, ἐσπούσαμε(ν, ἐσπάτε, ἐσπούσανε.

(*b*) -έω verbs.

The forms in Karpathos are analogous to those of the -άω verbs : *e.g.*

[1] Except in the half-extemporary couplets, with which the village dance is enlivened. In these the ending -σι(ν occasionally occurs.

ἐπάτου(ν, ἐπάτεις, etc., but at Palaíkastro the 2nd and 3rd sg. are on a different model, and the paradigm is :—ἐπάτου(ν or ἐπάτουνα, ἐπάτι̯ες, ἐπάτι̯ε, ἐπατούσαμε(ν, ἐπατείτε, ἐπατούσανε.

Going side by side as it does with the treatment of the palatals, the preference in the south of Karpathos for the 3rd pl. in -ούσα(ν is noticeable. In both cases the dialect of the southern part of the island approximates to the Cretan, though always falling short of it.

B. *The Passive and the Substantive Verb.*—The present of εἶμαι at Elymbos runs :—εἶμαι, εἶσαι, εἶνε, εἴμεθα, εἶστε, εἶνε, and the imperf. is ἤμου(ν, ἤσου(ν, ἦτο(ν, ἤμεθα, ἦστε, ἦτο(ν.

The paradigm in use at Voládha and Menités differs only in the 1st pl., which is εἴμεστα(ν. I do not know whether ἤμεθα has the ν ἐφελκυστικόν, but I suspect that it has.

The paradigms from Palaíkastro are :—present, εἶμαι, εἶσαι, εἶνε, εἴμαστανε, εἴσαστανε, εἶνε ; imperf., ἤμουνε, ἤσουνε, ἦτονε, ἤμαστανε, ἤσαστανε, ἦσανε.

The passive paradigms closely resemble these. The 1st and 3rd persons pl. and the singular of the impf. are the most interesting. From Elymbos we have ἔρκομαι, ἔρκ'εσαι, ἔρκ'εται, ἐρκούμεθα, ἔρκ'εστε, ἔρκουτται ; imperf. ἤρκουμου(ν, ἤρκουσου(ν, ἤρκετο(ν, ἐρκούμεθα, ἤρκ'εστε, ἤρκουττο(ν.

The forms in the southern villages only differ, as above, in the 1st pl. which is ἐρκούμεστα(ν. The forms at Palaíkastro for the present differ only in the 1st pl. ἔρχουμὲστανε and the 3rd pl. ἔρχουdαι. The imperfect is ἤρχουμουνε, ἤρχουσουνε, ἤρχουdονε, ἤρχουμὲστανε, ἤρšεστε, ἤρχουdανε.

The passive of the -έω verbs almost always has forms of the ι̯ type like the active ἐπάτι̯ε. Thus at Elymbos we find βαρι̯ούμαι, βαρι̯έσαι, *etc.*, which at Palaíkastro appears as βαρžούμαι, *etc.* Otherwise the passive of the contracted verbs offers nothing of particular interest. As an example of it the imperfect of βαρι̯ούμαι may be given. At Elymbos it is, ἐβαρι̯ούμου(ν ἐβαρι̯ούσου(ν, ἐβαρι̯έτο(ν, ἐβαρι̯ούμεθα, ἐβαρι̯έστε, ἐβαρι̯ούττο. At Palaíkastro the usual ending and the characteristic treatment of the ι̯ give ἐβαρžούμουνε, ἐβαρžούσουνε, ἐβαρžούdονε, ἐβαρžούμεστανε, ἐβαρžέστε, ἐβαρžούdανε. The only forms I have without the ι̯ are πατούμαι and πατούμεθα from Elymbos ; the rest of the persons of the tense, πατι̯έσαι, etc., have it.

The aorist passive in conjugation agrees with the tenses of the active.

For the future besides the usual *θὰ*, in Karpathos *θέννα* appears and at Palaíkastro *θάνα*.

R. M. DAWKINS.

NOTE.—To the list of islands, where laws of inheritance similar to that of Karpathos formerly existed, given in the first part of this paper (*B.S.A.* ix. p. 200), should be added the island of Nisyros. The reference is to the Nisyrian Glossary in the *Σύγγραμμα περιοδικόν* of the *Ἑλληνικὸς Φιλολογικὸς Σύλλογος* of Constantinople, Vol. xix., p. 191, *sub voce*, *Βονηκάρχης*.

NOTE (§ 3, above).—A wooden lock, *μάνταλος*, of exactly the Parian type, is just dying out in East Crete. I was able to get one made for me at Palaíkastro. They are still used, I am informed, in the village of Pyrghí in Chios, where also the ancient dress of the women of Elymbos is preserved. Their resemblance to the wooden locks of Egypt and Palestine is to be noted. In Palestine a lock is sometimes found, so primitive as to have no *βαλάνια* to hold the bolt, which is inside, and moved directly by the key, a crooked piece of iron, in shape and function like the secondary key of the Karpathian *μαντάλα*, and, like it, catching in grooves cut in the bolt. Here then we have in actual existence the very simple lock that was suggested in the first part of this paper as being the type of lock known to Homer.

NOTE (§ 6, p. 205, above).—Against the suggested position of Nisyros is the fact, which I owe to a kind letter from Baron Hiller von Gaertringen, that *Σαρία* is itself an ancient name, as *Σάριοι* occur in the Attic tribute-lists. He also thinks that the *πορθμός* in question must be between Karpathos and Saria, as the word is always used of the passage between two separate pieces of land.

Additional evidence of the inhabitation of Saria in the Bronze Age is afforded by three bronze implements, a knife, a chisel, and a celt, from this island, presented to the British Museum in 1889, by Mr. W. R. Paton, and published with two figures by Mr. H. B. Walters, *J.H.S.* xvii. p. 64. Mr. Walters says that Saria is supposed to be the ancient Nisyros.

GROTESQUES AND THE EVIL EYE.

In discussing the so-called Alexandrian Grotesques in a paper in this Annual last year[1] I expressed the opinion that they should be assigned to Campanian art. I have, however, since then been enabled to study these grotesques more closely; and have in consequence been led to modify my former opinion very considerably. Though these grotesques were very popular in Italy during the late republican and the imperial periods, they were by no means peculiar to the west. They fall naturally into several classes, which, for convenience, are here given in tabular form.

A.—Genre Figures (Marble Statuettes).

1. Drunken old woman. (*a*) Rome, Capitol. Helbig[2] 439. (*b*) Munich. Furtwängler, *Beschreibung d. Glyptothek*, 437. (*c*) Dresden: head only. *Arch. Anz.* 1889, pp. 98, 99, with illustration.

2. Fisherman. Rome, Palazzo dei Conservatori. Helbig[2] 601; Collignon ii. Fig. 290.

3. Peasant woman carrying lamb. Rome, Palazzo dei Conservatori. Helbig[2] 602; Collignon ii. Fig. 291.

4. Peasant woman carrying chickens. (See p. 112.) Rome, Maggazino Archeologico (in garden). Fig. 1.

5. Fisherman. (*a*) Rome, Vatican, Gall. d. Cand. 177. Helbig[2] 378; Brunn-Bruckmann 164. (*b*) Louvre. H. de Villefosse, *Cat. Sommaire* 1354 (in black marble, with loin cloth of alabaster). (*c*) Louvre. H. de Villefosse, *ibid.* 470. Statuette. (*d*) Rome, Palazzo Massimi alle Colonne, by fountain in Cortile. Statuette, torso only, right arm was raised. (*e*) Formerly in Coll. Pacetti. Clarac, 879, 2243. (*f*, *g*) Villa Albani. Meyer-Schulze on Winckelmann, *Geschichte d.*

[1] *B.S.A.* ix. p. 241. I take this opportunity of expressing my hearty thanks to Dr. Hartwig for allowing me to publish the bronze in his possession, to Prof. Ridgeway, Mr. W. L. H. Duckworth, and Mr. E. H. Minns for much valuable information and assistance, to Mr. Cecil Smith for notes on the British Museum bronzes, and to Mr. Stuart Jones, Director of the British School at Rome, who has read my MS. and made many valuable suggestions.

Kunst, xi. 3, 5, *note* 16. (*h*) Toulouse. Joubin, *Marbres-Tolosanes*, Pl. XV. 200 B. (*i*, *k*) Rome, Capitol, Stanza d. Filosofi, 39, 40: heads only. Bernoulli, *Gr. Ikon.* i. p. 164.

6. Fisherman. British Museum. A. H. Smith, *Cat. Greek Sculpture*, iii. 1765; Collignon ii. Fig. 289.

7. Fisherman. British Museum. A. H. Smith, *ibid.* iii. 1766; *Brit. Sch. Annual*, ix. p. 228, Fig. 3.

8. Tumbler: negro. British Museum. A. H. Smith, *ibid.* iii. 1768; Collignon ii. Fig. 293.

9. Shepherd. (*a*) St. Petersburg, Hermitage. Kieseritzky, *Catalogue*, 158; Clarac, 742, 1793. (*b*) Rome, Palazzo Lazzaroni. *E.V.* 1171.

10. Peasant. Dresden. *Arch. Anz.* 1894, p. 173, Fig. 9.

FIG. 1.—MARBLE TORSO OF A PEASANT WOMAN CARRYING CHICKENS.

11. Peasant. Dresden. *Arch. Anz.* 1889, p. 99 with illustration: head only.

12. L'écorcheur rustique. Louvre. H. de Villefosse, *Cat. Sommaire* 517; Clarac, 287, 1785.

13. Old woman carrying infant Harpocrates. Vatican, Gall. d. Cand. 130. Mus. Chi. iii. Pl. 44; *Röm. Mitth.* 1904, p. 12.

14. Satyr on goat. Vatican, Gall. d. Cand. 133. Biondi, *Mon. Amaranziani*, Pl. 36.

15. Peasant. Vatican, Gall. d. Cand. 265. Clarac, 741, 1790.

16. Old woman. Vatican, Mus. Chiaramonti, 580. Amelung, p. 698, Pl. 74.

17. Old woman. Rome, Palazzo Doria-Pamphili. Clarac, 778, 1948; Matz-Duhn, 1208.

18. Shepherd. Rome, Palazzo Colonna. *E.V.* 1152; Matz-Duhn, 1204.

B.—HUNCHBACKS (BRONZES).

1. Long-headed, stooping man; large phallus. Copenhagen, Nat. Museum.

2. Bald eunuch (?); large phallus; playing lyre; negroid: from Cöln. Berlin, Antiquarium, F. 2142.

3. Similar to 2. Berlin, Antiquarium, F. 2143.

FIG. 2.—HUNCHBACK. UNPUBLISHED BRONZE IN THE BRITISH MUSEUM.

4. Cripple, wears wide-brimmed hat, and a bag hanging from his left shoulder; large phallus: from Egypt. Berlin, Antiquarium, 8756. *Arch. Anz.* 1904, p. 38, Fig. 14.

5. Nude dwarf, carries in left hand a cock that pecks at his face and in right hand an oenochoe; large phallus. Bologna, Museo Civico.

6. Seated eunuch (?), negroid: from a Roman house at Herbrechtingen. Stuttgart, *Arch. Anz.* 1890, p. 97 (Figured).

7. Nude male figure; large phallus. Vienna. Von Sacken, *Die ant. Bronzen*, Pl. 46, 5.

8. Nude porter; large phallus. Vienna. Von Sacken, *ibid.* Pl. 46, 6.

9. Armed pigmy. Paris, Cab. d. Médailles. Babélon-Blanchet, *Catalogue*, 508.

10. Fighting pigmy. Paris, Cab. d. Médailles. Babélon-Blanchet, *op. cit.* 509.

11. Dancing pigmy; negroid; large phallus. Paris, Cab. d. Médailles. Babélon-Blanchet, *op. cit.* 511.

12–19. Various hunchbacks. Florence, Museo Archeologico, 281, 341, 351, 353, 355, 356, 357, 2, 557. Uncatalogued and unpublished. All have a large phallus; 356 holds a bird in his right hand.

20. Hunchbacked beggar. Cairo. 27707. *Arch. Anz.* 1903, p. 149, Fig. 4, n.

21. Hunchbacked old man, wears loincloth: from Sicily. Schott, Coll. Jena, *E. V.* 1475*a*, *b*.

22. Seated hunchback; large phallus. British Museum, *Cat. of Bronzes*, 1666.

23. Hunchback; large phallus. British Museum, as yet unpublished. (Fig. 2).

C.—Dwarfs (Bronzes).

1. Armed pigmy; large phallus: from Southern Italy. Copenhagen, Nat. Museum.

2. Nude pigmy; large phallus: found in Rome: in possession of Dr. Hartwig. (Figs. 3, 4[1].)

Figs. 3, 4.—Nude Pigmy. Unpublished Bronze in the Possession of Dr. Hartwig.

3. Dancing pigmy, holds flowers. Berlin, Antiquarium, 8487.

4. Dwarf, wreathed, carries cock in left hand, in right oenochoe: from Egypt. Berlin, Antiquarium, 8724. *Arch. Anz.* 1904, p. 38, Fig. 15.

5. Nude pigmy; large phallus. Braunschweig, Herzogl. Museum, 327.

6. Nude dancing pigmy; large phallus. Modena, R. Galleria Estense.

7. Armed pigmy; large phallus. Cassel, Mus. Fredericianum, B. 71.

[1] The phallus does not appear in the illustration.

8. Armed pigmy. Avignon, *Monum.* 1839, Pl. 25. Reinach, *Répertoire*, 564, 1.

9. Pigmy. Dresden. *Arch. Anz.* 1891, p. 165, 4.

10. Pigmy with crane under left arm. Paris, Louvre, 387; Reinach, *ibid.* 565, 2.

11. Pigmy boxing. Paris, Louvre, 386. Reinach, *ibid.* 565, 3.

12. Aged dwarf. Paris, Louvre. Reinach, *ibid.* 565, 4.

13. Dancing dwarf; large phallus. Naples. Roux-Barré, *Herc. Pomp.* viii. Pl. 41, 1. Paris, Louvre. Reinach, *ibid.* 565, 4.

14. Dancing dwarf; large phallus. Gori, *Mus. Etrusc.* i. 57, 1.

D.—Miscellaneous Grotesques (Bronzes).

1. Living skeleton; large phallus; bald; carries two birds in right hand, oenochoe in left hand. Berlin Antiquarium, F. 2146.

2. Living skeleton playing lyre; large phallus, infibulated. Rome, Museo Kircheriano. Winckelmann, *Mon. Ined.* 188, p. 245; Reinach, *ibid.* 565, 6.[1]

3. Seated, bald, shrivelled old man. Naples, Mus. Nazionale, Inv. 5492.

4. Negro bust, Punch head, hunchbacked (perhaps a weight): from Italy (?). Berlin, Antiquarium, F. 2144.

5. Punch head. Munich, Antiquarium, 1147.

6, 7. Similar heads. Paris, Cab. d. Médailles. Babélon-Blanchet, *op. cit.* 986; Rome, Mus. Kircheriano.

8. Living skeleton, as Atlas on handle of vase; large phallus. Athens, Demetriou Collection. *Ath. Mitth.* 1885, Pl. X.

9. Trumpeter; large phallus. Oxford, Ashmolean Museum, 66 (Fortnum Coll.).

10. Circumcised Beduin (?); large phallus. Goethe Coll., Weimar. *Jahrbuch*, 1897, p. 49, illustrated.

E.—Negroes (Bronzes).

1. Young negro, wearing trousers, hands behind back: from Egypt. Berlin, Antiquarium, 7456. *Arch. Zeit.* 1880, p. 39.

2, 3. Similar negroes, but wearing loin cloths (from pedestal of statue or grave monument): from Cairo. Berlin, Antiquarium, 10485, 10486.

4. Young hawker. Paris, Cab. d. Médailles. Babélon-Blanchet, *op. cit.* 1009; Collignon ii. Fig. 294.

5. Fellah hawker. Athens, Demetriou Coll. *Ath. Mitth.* 1885, Pl. XI. 1.

6. Hawker and monkey. Athens, Demetriou Coll. *Ath. Mitth.* 1885, Pl. XI. 2.

7. Nubian boy. Paris, Cab. d. Médailles. Babélon-Blanchet, *op. cit.* 1010.

8. Dancing negro, in chiton. Naples, Museo Nazionale, Inv. 5486.

9. Nude negro woman: from Egypt. Leipzig. *Arch. Anz.* 1890, p. 157, Fig. 8.

10. Negro slave crouched on rock by rabbit. (*a*) British Museum; Walters, *Catalogue* 1663. (*b*) Oxford, Ashmolean Museum, 67 (Fortnum Coll.).

11. Head of Lybian: from Cyrene. British Museum. Walters, *Catalogue*, 268.

[1] This and similar figures are mentioned by Stieda (*Anatomische Hefte*, xix. 1902) in discussing infibulation.

The above list is by no means complete. It would be easy to make additions to it with a little research, especially as regards negroes. It would not be of service, however, in the present case to deal with the difficult subject of the representation of negro races in Greek art.[1] The provenance of most of the above negro bronzes is Egyptian; and it is at least natural that they should have been popular in Alexandrian art. Two at least, the Nubian boy at Paris (7), and the Cyrene head in London (11), are after originals, if not themselves originals, of the second century B.C. They are far superior in style and workmanship to any of the others; but while the Paris bronze is a vivid study from life, the Cyrene head seems rather an ideal representation of the racial type. It is doubtful if the others belong to the Greek or Graeco-Roman period of Alexandrian art: and in this connexion it must be remembered that bronze weights in the form of negro busts are fairly common throughout the Roman world.[2] Further, the marble negro head at Berlin from Thyreatis, which Schrader[3] places at the end of the second or beginning of the third century A.D., is evidence that negro models were also studied in Greece. The vigorous and lifelike manner in which it is treated recalls the very characteristic portraits of Caracalla,[4] and shews that art was not yet exhausted.

Also it will be observed that the list above contains principally small bronzes, and that only one class (*A*) consists of marble figures. Further, no mention is made of the large number of grotesque terracotta figurines that come principally from Asia Minor. These, however, will be dealt with later. The small grotesque bronzes, which are usually said to be Alexandrian, must first be discussed.

As regards the supposed Alexandrian origin of these grotesques, I think the *onus probandi* lies with those who assert it. A few such grotesques have certainly been found in Egypt, many have been found in Italy, and many others are unfortunately of unknown provenance. In all probability some of them came from Greece or Asia Minor. And since the workmanship is in practically every case of the imperial period, the most

[1] This, I hope, will form part of Prof. Bienkowski's projected *Corpus Barbarorum*.

[2] *v. Arch. Anz.* 1890, p. 157, 7. The glazed vases (a technique derived from Egypt) found in S. Russia, which represent grotesques and scenes of daily life (comic Judgment of Paris, fishermen, pigmies, and cranes, etc.), also date from the imperial period; one of them was found with coins of Domitian: *v. Proceedings Moscow Arch. Soc.* xv. 2 (1894), Pl. II.–IV.; *Proceedings Odessa Arch. Soc.* xxii. Pl. 1, 2.

[3] *Marmorkopf eines Negers.*

[4] Bernoulli, *Röm. Ikon.* ii. 3, p. 47, Pl. 20–21.

natural assumption is that such grotesques were popular all over the Graeco-Roman world. Those who defend their Alexandrian origin assert that they illustrate the strong realistic tendencies of Alexandrian art. But as works of art these bronzes are very inferior. They are mostly very coarse and rough in execution, and entirely lack all fine modelling. If then they were not works of art, what purpose did they serve? The majority of them were, I believe, used as charms against the Evil Eye.

It is well known that the belief in the evil eye is widespread to-day in all the Mediterranean lands. It is perhaps not so well known that it was equally widespread in classical and in prehistoric times. This has been conclusively shewn by Jahn in his masterly treatment of the subject.[1]

At the present time in Italy little hunchbacks (*gobbi, gobbetti*) of coral, mother-of-pearl, silver, or some other precious material are worn on watch-chains or on bunches of charms as one of many various protections against the evil eye.[2] Now it will be noticed that amongst the grotesques given above, one class (*B*) consists entirely of hunchbacks. In class *C* there are nothing but dwarfs, while class *D* contains various misshapen or under-sized creatures, which do not admit of precise classification. These were all probably charms against the evil eye; at least the first two classes mentioned certainly were. Pollux[3] says:—*πρὸ δὲ τῶν καμίνων τοῖς χαλκεῦσιν ἔθος ἦν γελοιά τινα καταρτᾶν ἢ ἐπιπλάττειν ἐπὶ φθόνου ἀποτροπῇ. ἐκαλεῖτο δὲ βασκάνια κ.τ.λ.* Phrynichus[4] is more explicit in saying:—*βασκάνιον ὃ οἱ ἀμαθεῖς προβασκάνιον· ἔστι δέ τι ἀνθρωποειδὲς κατασκεύασμα βραχὺ παρηλλαγμένον τὴν ἀνθρωπείαν φύσιν ὃ πρὸ τῶν ἐργαστηρίων οἱ χειρώνακτες κρεμαννύουσι τοῦ μὴ βασκαίνεσθαι αὐτῶν τὴν ἐργασίαν.* This practice was probably not confined to metal workers, since in the *Vita Aesopi* it is related that when his fellow slaves first saw Aesop they said that their master had bought him as *προβασκάνιον τοῦ σωματεμπορείου*.[5] Jahn in citing these passages suggested that perhaps the frequent representations of pigmies and misshapen dwarfs at Pompeii were due to this belief.[6] Helbig is however of opinion that the Pompeian paintings representing such grotesque figures are derived from Alexandrian art.[7] The reliefs on the

[1] *Berichte d. sächsischen Gesellschaft*, 1855, p. 28, *seqq.* Cf. Michaelis, *J.H.S.*, 1885, p. 312.

[2] It is also considered lucky to meet a hunchback on first going out on New Year's Day, and it is especially lucky to touch his hump. *Cf.* Elworthy, *Evil Eye*, p. 331.

[3] vii. 108.

[4] Bekker, *Anecd.* p. 30, 5.

[5] *Vit. Aes.* 3, p. 12, 12.

[6] *Op. cit.* pp. 66, 67.

[7] *Untersuch. ü. d. camp. Wandmalerei*, p. 138.

base of the Nile in the Vatican, a copy of an Alexandrian original, shew similar figures. These reliefs too are probably the copyist's attempt to render plastically the painted base of the original. So, since it is known that painting flourished in Egypt, it cannot be said that figurines in paintings are charms against the evil eye.

But that these bronzes are such charms as are described in the passages cited, is, I think, made more certain by another point, the treatment of the phallus. The treatment of this organ is very marked: the *membrum* is in nearly every case of abnormal size and length, but is not erect. The phallus was, as is well known, a most potent charm against the evil eye, and Jahn gives many illustrations of this.[1] Further, one of these figures, the Goethe grotesque (D 10), which is not a hunchback, but a misshapen negroid with a large *membrum*, is also making with his right hand one of the best known signs against the evil eye. This sign consists in placing the thumb between the first and second fingers of the closed hand. It is used to-day in Italy,[2] both the actual gesture and its representation in coral or other material, and it is known as *la fica*. Ovid[3] describes it, and amulets shewing hands making it have been found in South Russia, as well as in Italy itself.[4] The fact that this charm is found in conjunction with the phallus on one of these grotesques makes it practically certain that they are charms against the evil eye. It is an exceedingly common practice to wear charms in bunches, or to attach charms to another that easily lends itself to such a purpose, as the Neapolitan charm called *la cimaruta*.[5] Similar instances of this are the necklace and relief discussed by Jahn.[6] It will thus be observed that another similar charm[7] used at the present day was also used in classical times.

There now remain for consideration the *genre* figures, class *A* of the list given above. These cannot possibly be classed together with the

[1] *Op. cit.* p. 68, *seqq.* It may be urged by those who say that these grotesques illustrate the Alexandrian artist's close observation of nature, that priapism is a common symptom in cases of injury to the spine. This is true, but it is not a symptom in the case of a natural humped back which is due to tuberculosis of the spine cured naturally.

[2] Also in Spain and Germany (Jahn, *op. cit.* p. 80), in France, Portugal, and Greece (*Sittl. Gebärden d. Griechen u. Römer*, p. 102), and in England (Elworthy, *Evil Eye*, p. 255).

[3] Signaque dat digitis medio cum pollice iunctis. *Fasti* v. i. 33.

[4] *C.R.* 1866, Pl. II. 34, 1872, Pl. III. 11. Jahn, *op. cit.* Pl. IV. 9, 19, V. 2.

[5] Elworthy, *Evil Eye*, pp. 306, 344, Figs. 81, 161, 162.

[6] *Op. cit.* Pl. V. 1, 3.

[7] Others still in use to-day are the various hand-gestures, coral, horns, tusks, or teeth of wild animals, the moon, and the hand covered with symbols: v. Jahn, *op. cit.* pp. 53, 43, 58, 39, 101.

grotesque bronzes. They all illustrate rustic or similar picturesque types; and since we possess replicas of some of them, these at least must have been well known and popular. Now one of these picturesque types, the drunken old woman, has according to Brunn's[1] very probable conjecture been identified with the *Anus ebria* of Myron at Smyrna mentioned by Pliny.[2] This sculptor cannot have been the great Myron. Not only are the character of the subject and the style of the figure entirely foreign to what we know of his artistic characteristics, but also there are other grounds for believing in the existence of a later Myron. Two passages in Pausanias[3] are impossible to explain unless a later Myron is supposed, and a sculptor of this name was working at Pergamum[4] in the second century. Further, the shape of the vase is of the Hellenistic period, and the type is found adapted for second-century vases.[5] This can at least form a working hypothesis for examining some of the tendencies of art in Asia Minor in the second century.

I have elsewhere deduced from coins a naturalistic tendency in the art of this century.[6] Literary evidence also points in the same direction.[7] Already the Fisherman (2) and the Peasant woman (3) have been claimed as examples of this tendency in Asia Minor.[8] The so-called Seneca[9] head which is universally ascribed to the 'Hellenistic' period shews exactly the same rendering of an aged person as the *Anus ebria*. The texture of the coarse wrinkled skin is the same in both; in both the sinews and bony framework are prominent, owing to the falling in of the flesh between them. Possibly they are both after originals of the same artist. This Myron must have been active at the end of the third and beginning of the second century. Next in point of date we can place the Fisherman and the Peasant woman (2, 3); and with these can be classed the fine, but

[1] *Geschichte d. Griech. Kunstler*, i. 144.

[2] Mrs. Strong thinks the identification certain, but believes the sculptor to be the great Myron. See her note on Pliny xxxvi, 32 (Jex-Blake and Sellers, *Pliny's chapters on the History of Art*).

[3] Paus. vi. 2, 2; 8, 5. See Frazer's notes thereon.

[4] Löwy, *I.G.B.* 154. Collignon (*Hist. Sculpt. Grecque* ii. p. 592, 1) presumes the existence of three Myrons.

[5] Weisshäupl, Ἐφ. Ἀρχ. 1891, p. 144.

[6] *B.S.A.* ix. p. 236, *seqq.*

[7] *E.g.* Theocritus i. 38.

[8] Pfuhl, *Röm. Mitth.*, 1904, 1, 1.

[9] Helbig,[2] 476. Bernoulli, *Griech. Ikon.* ii. p. 171. Cf. the old woman in the Capitol, Helbig,[2] 520.

unfortunately much damaged, Torso[1] in the Magazzino Archeologico (Fig. 4, see p. 103). This Torso represents an old Peasant woman carrying to market some chickens in a goatskin knotted on her right shoulder. She is clad in a sleeveless exomis which leaves the right shoulder and breast bare. This affords the artist an opportunity for shewing his skill in rendering the aged, shrunken forms. The result is picturesque and realistic, but hardly pleasing. The workmanship proves that it is only a Roman copy of about the first century A.D., as also are the two statuettes just mentioned; and it was probably, like them, made for the decoration of a Roman garden.[2]

Following up this rustic style, we can place in the first century the British Museum fishermen (7, 8), and the St. Petersburg shepherd and its replica (9). To the Alexandrian art of this century may in all probability be attributed the original of the old woman carrying the image of the infant Harpocrates (13), and possibly the Satyr riding a goat[3] (14). To a Roman attempt to imitate this style in the first century A.D. are probably due the peasants at Dresden, and in the Galleria dei Candelabri (10, 11, 15), and possibly also the shepherd in the Palazzo Colonna[4] (18). On the other hand, the fisherman (5), of which so many replicas are extant, to judge by the rendering of the eyes can hardly be earlier than the Hadrianic period; but its position in the series cannot by any means be definitely fixed as yet. Similarly the old women (16, 17), which probably go back to originals of the second century B.C., might also be placed in this later period. A brief examination of this series will shew that the style gradually grows coarser. The picturesque rustic genre, working from the living model,[5] by degrees degenerates into crude ultra-realism; and the later examples are merely imaginative studies of the studio, which attempt a vivid realism through brutality in rendering.

In conclusion it remains to discuss briefly the terracotta grotesques.[6]

[1] I do not know if this is the torso referred to by Arndt (*E. V.* 1171) as a replica of the Hermitage Shepherd (9). The Magazzino Archeologico fragment is certainly female, and the arrangement of the drapery is totally different from that of the Petersburg and Palazzo Lazzaroni figures.

[2] *v. Bull. Comm.* 1875, p. 242, 5, 1880, p. 287, 4.

[3] Pfuhl, however, attributes it to Asia Minor: but compare the Harueris published by him, *Röm. Mitth.* 1904, p. 1, *seqq.* Pl. 1.

[4] There are other examples of Roman work in this style in the Museo Chiaramonti, Amelung, *Cat. Sculp. Vat. Mus. Chi.* 59, 280, 583.

[5] Peasants carrying lambs similar to the peasant woman in the Palazzo dei Conservatori (3) can be seen at markets in modern Greece and Asia Minor.

[6] *v.* Winter, *Typenkatalog* II. pp. 432–447, 455–469. Cf. Pottier-Reinach, *Nécropole de Myrina*, p. 485, 4.

The great majority of these come from Asia Minor,[1] some have been found in Egypt,[2] some in South Russia,[3] some in Greece proper,[4] and some also in Italy.[5] In their artistic qualities these are superior to the bronzes discussed above, but inferior to the marble statuettes. There is however considerable variation in their style, which is often quite common. In consequence it is hard to say whether the subject represented or the art of the representation was the *raison d'être* of these grotesque terracottas. Perhaps both. At least some of these figurines by their rude style and by the abnormality of the phallus seem to have been intended for charms.[6] These, however, are a comparatively small class. The others are of a different character. Unfortunately we have but few whole figures; the grotesques that come from Smyrna are usually bodiless heads, and so it is hard to tell whether the figures represented hunchbacks or not. In many cases the heads are obviously those of diseased persons; and the purpose of these is as yet unknown.

The majority of these figurines, however, may be called caricatures.[7] They caricature ordinary men and women, hawkers, soldiers, peasants, magistrates, and officials, and in a broad and exaggerated manner that suggests Continental comic papers and occasionally the style of Phil May or Tom Browne. I am enabled to illustrate here (Fig. 5), by the kindness of Professor Kekulé and Dr. Zahn, an almost complete figurine of this character, recently acquired by the Berlin Antiquarium[8] from Thyatira. It is a caricature of an itinerant fish hawker resting on a rock. He is clad only with a cloth about his loins; on his head he wears a peculiar kind of wide-brimmed cap; and on his left wrist he carries his fish basket. The treatment of the face suggests disappointment at ill success in selling his wares: this effect is heightened by his lean, miserable body. It is brutal, but effective.

[1] Pottier-Reinach, *Nécropole de Myrina*, Nos. 323–339. Wiegand-Schrader, *Priene*, p. 357, *seqq.* Figs. 434–443. Furtwängler, *Coll. Sabouroff*, Pl. 138. Cf. Gaudin collection in the Louvre, as yet unpublished (from Smyrna).

[2] Lenormant, *Coll. Raifé*, 1189, 1191. Walters, *B.M. Cat. Terracottas*, C. 591, 605, 646. Cf. C. 709, 819 (from Cyrene).

[3] *C.R.*, 1869, Pl. II., Pl. III. 14, 1870, Pl. V. 9, 10, 1873, Pl. III. 6, 7, 8, 1874, Pl. I. 8, 1877, Pl. V. 11.

[4] Martha, *Cat. d. Figurines d'Athènes*, 64, 66, 423, 424, 677. Walters, *op. cit.* C. 44, 62, 63, 205, 206, 208, 216, 243, 333.

[5] Walters, *op. cit.* D 350, 358, 364–366, 385, E. 30–32.

[6] *E.g.* those from the grave of a priestess (?) at Blisnitza, *v. C.R.* 1869, *loc. cit.* p. 146, *seqq.*, and some hunchbacks, *e.g.* Winter, *op. cit.* II. p. 447. 5.

[7] Cf. Pottier-Reinach, *op. cit.* p 476, *seqq.*

[8] Inv. 8761. Height ·175 m.

To discuss these terracottas fully and to separate them into classes[1] would need long and patient study; and I have only ventured to touch briefly on them here because the nature of my subject seemed to demand it.

FIG. 5.—TERRACOTTA FIGURINE REPRESENTING AN ITINERANT FISH HAWKER.

In conclusion I may be allowed to express the hope that this brief and imperfect paper will call some attention to the belief in the evil eye in antiquity, and to the monuments illustrating that belief; and also to the fact that in such questions as these Anthropology is of great assistance to Archaeology.

ALAN J. B. WACE.

[1] *v.* Winter, *Typenkatalog*, *loc. cit.*

A THIRD ETEOCRETAN FRAGMENT

(THE *NEIKAR*-INSCRIPTION).

[After this article was in paged proof, a letter was received from Mr. Bosanquet, suggesting certain alterations; he points out that, after a prolonged study of the stone, and by comparison with other inscriptions from the same site, he is convinced that the supposed interpuncts (see p. 118) are non-existent. Mr. Bosanquet further states that his notes were not written for publication, but were intended to aid in the decipherment of the inscription; and finally, that he feels no doubt about the F in l. 5. (See note on page 123.)—*Ed.*]

§ 1. A WELCOME addition to our knowledge of this language, the pre-Hellenic speech of Praesos and therefore the direct representative, according to all the traditions, of that spoken at the Court of Minos, was made in the continued explorations of the Altar-hill of Praesos by the British School in June 1904. As the *nomos*-fragment was found among débris which had fallen from the temple on the top of that hill, Mr. Bosanquet set himself to explore a line of 'pockets,' or vertical cavities in the rock along the side of the hill, some distance below the summit. One of these was choked with large pieces of rock which he removed by blasting; and he was rewarded by the discovery underneath of the new and most interesting inscription reproduced here. Unfortunately, like the *barxe-* and *nomos*-fragments, it is mutilated by vertical fractures so that we have no complete continuous line of text; but enough remains to add much to our knowledge of the general character of the language, and to confirm in some striking particulars—so far as I may be allowed to judge—the tentative conclusions suggested by the evidence of the other two documents (see the *Annual* for 1901–2, pp. 125–156).

By the kindness of Mr. Bosanquet I received a photograph and what seems a very clear 'impression' of the stone within a week or

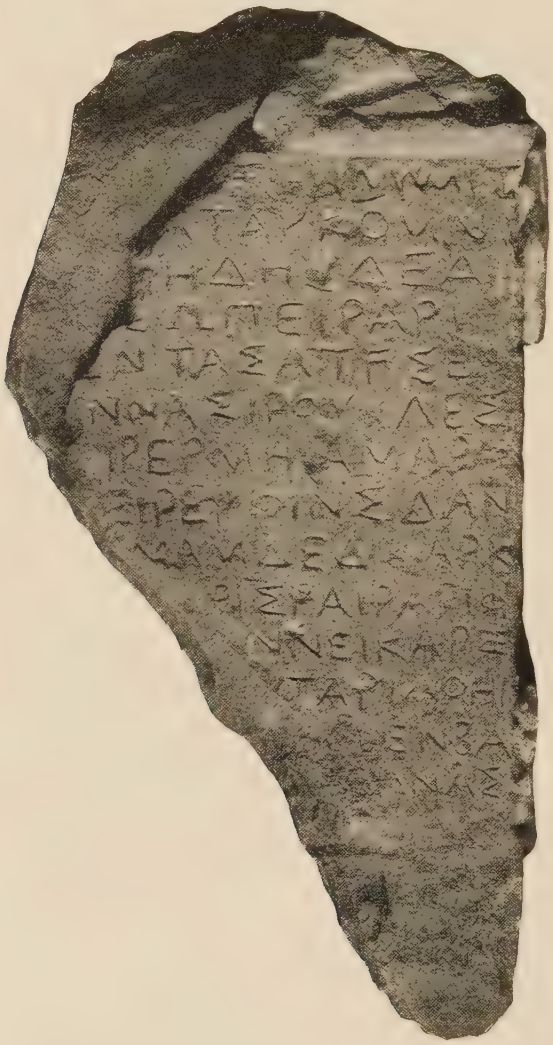


FIG. 1.—THE NEIKAR INSCRIPTION.

two of its discovery. In a letter of June 16 he sent me his own reading of the text, with some critical notes, which I reproduce below. At

his suggestion I gave to the Anthropology Section of the British Association at the Cambridge Meeting in August 1904 a brief account of the prima facie results of his discovery; and it is at his request and that of Mr. R. M. Dawkins (of the British School), to whom I owed valuable information in regard to the *barxe*-inscription (*Annual* l.c.) and who had originally undertaken the publication of this new text, that these notes upon it are now offered to the readers of the *Annual*. Whatever errors they may be found to contain will at least be in harmony with the doctrines defended in my previous article.

§ 2. The inscription is in the Ionic alphabet with one new sign (Ϝ) and shows Η and Ω which were absent from the *nomos*-inscription, and Λ, not Ɩ. The fragment is complete on the right-hand side and in all the lines save 3 and 4 the writing is continued to the end. The text is as follows (dots indicate uncertain lines):

1 ΞΟΝΝΥΜΙΤ
ΑΤΑΡΚΟΜΝ
ΡΗΔΗΣΔΕΑ
ΣΩΠΕΙΡΑΡΙ
5 ΝΤΑΣ·ΑΤΡΣΕΥ
ΝΝΑΣΙΡΟΥΚΛΕΣ
ΙΡΕΡΜΗΙΑΜΑΡΦ
ΞΙΡΕΡΦΙΝΣΔΑΝ
ΜΑΜΔΕΔΙΚΑΡΚ
10 ΡΙΣΡΑΙΡΑΡΙΦ
Ν·ΝΕΙΚΑΡ·Ξ
ΤΑΡΙΑΟΗΙ
ΕΝΒΑ
ΝΑΣ

[The critical notes which follow are Mr. Bosanquet's.—R. S. C.]

"What we have is the right-hand side and top of a small stele of fine white freestone, originally crowned by a small pediment with acroteria.

Greatest length ·40 m.
Greatest breadth ·20 m.
Greatest thickness ·06 m.

The letters vary from ·007 to ·015 in height; on the average ·012.

I should guess that the longest line preserves about $\frac{2}{3}$, at any rate $\frac{1}{2}$, of the length of the complete line.

Below the last lines is a space of injured surface, probably once inscribed.

L. 1.—The second sign is probably O, but not certainly.

L. 2.—The first sign probably A.

Ll. 3 and 4, leave a letter's space blank at the end.

L. 7.—Between H and A a slender letter is lost, probably I.

L. 14.—The first inclined hasta has a faint stroke below it, which may be accidental. The sign is either Λ or Δ, probably the latter."

§ 3. The text therefore (in which Mr. Bosanquet and I concur with the exception of the interpuncts, in the existence of which he does not believe, and certain other small points of doubt, is as follows, the hiatus being measured as if each line originally held twenty-four letters, and doubtful letters being underlined.

.....xo̲nnumit	1
.....a̲tarkomn	
.....r̲ēdēsdea	
.....sōpeirari	
.....e̲ntas atŧseu	5
.....nnasiroukles	
.....irermei̲amarϕ	
.....eirerϕinsdan	
.....mamdedikark	

.....risṛairariϕ 10
.....in neikar x
.....ariḍoēi
.. ..enba
.....aṇas. 14

Notes on the Alphabet.

§ 4. We have before us the Ionic alphabet of the beginning of the fourth century B.C., but without examples of Θ, Χ, Ψ. On the other hand, Η and Ω now appear at Praesos and Λ with the value λ (line 6). These points suggest a date somewhat later than that of the *nomos*-inscription (*Annual* viii. p. 128), that is to say, well within the fourth century B.C.

§ 5. Since we know that this alphabet was in use at Praesos for writing Eteocretan at least from 500–400 B.C. (*ibid.* pp. 128, 133), and Η and Ω only appear in our present inscription, we need have no hesitation in ascribing to them in Eteocretan roughly the same sounds as they respectively possessed in the Greek spoken and written in Crete at the later date; and, however early the beginnings of the Κοινή may have been in the island, it is improbable that these symbols represented any very different sounds when used to write the Κοινή from what they did in writing Cretan Doric.

§ 6. The fact that in the *nomos*-inscription Ꞁ represented *l*, while Λ only appears in this later monument, strongly confirms the view suggested by the comparison of the *barxe-* and *nomos*-inscriptions, namely that Ꞁ survived because it had been necessary at an earlier date when Λ had had a different value, namely *υ* (*Annual* viii. p. 134).

§ 7. There remains for consideration the new symbol Ŧ which appears in l. 5 between Τ and Ξ. Now it may be assumed without hesitation that at this date, in this alphabet after a century's use, such a symbol cannot denote any vowel sound, but must be a modification for some special purpose of either Τ or Ϝ (or less probably Γ) (just as, to take an obvious example of a very common phenomenon, G was made in the Latin alphabet out of C, to denote the voiced guttural).

But since Ϝ had generally vanished[1] from the Ionic alphabet long before the end of the fifth century B.C., the new sign is clearly more likely to be a modification of Τ ; and this is the only supposition which gives us a sound at all likely to be pronounceable between Τ and Σ.

Further the nature of the sound denoted becomes at once clear when we recall a parallel modification of Τ, namely Ͳ, used by the folk of Halikarnassus about 450 B.C. (Roehl, *I.G.A.* 500, with his note) and others to denote the consonantal sound between the last two syllables of the name of their town, which by Athenians was written first ΣΣ and then ΤΤ ; namely, some sound closely allied to the English *ch*, German *tsch*, or the (rather softer) Italian *c* before *i* and *e*. The combination ΓͲΣ represents this complex sound with some minuteness, first the 'implosive' consonant, much like a *t*, heard first, then the palatal modification of it, and finally the hiss in which it ends. (On the general question of the value of σσ and ττ see Witton, *Am. Journ. Philol.* xix. p. 420.) This brings us at once to linguistic considerations.

NOTES ON THE LANGUAGE.

§ 8. But it will be well to preface the new enquiry by recalling the 'working hypotheses' in which our study of the two other inscriptions ended and comparing them with the new evidence. They were :—

(*a*) That Eteocretan was not a Semitic language, since many of its phonetic characteristics forbade such a suggestion (*Annual* viii. p. 141 ff.). The same characteristics (*e.g.* the diphthongs, and π beside φ) reappear here.

(*b*) That it was an Indo-European language, on the ground of the general character of its sounds and of the endings identified with certainty or probability.

The five certain endings in this inscription are—

-dea,

-ari

(as coming within the end of ll. 3 and 4),

-ɛntas, l. 5,

[1] For the latest survivals in the pure Ionic alphabet see Roberts, *Greek Epigraphy*, pp. 68–9, 189—190.

neikar, l. 11
(as coming before clear interpuncts),

-numit, l. 1
(as coinciding with *-kalmit* and *epimit* of the two other inscriptions).

Further we have for probable endings, as coming before what are probably interpuncts (p. 118 *sup.*)—

-ɾ̄ē, l. 3,
-rou, l. 6,
-mam, l. 9,
-en, l. 13,

and as possible endings *irer*, l. 7; *-φin*, l. 8; *de*, l. 9; and *sō*, l. 4.

Will anyone challenge any one of these as non-Indo-European?

§ 9. The epigraphic evidence we have noticed gives us in l. 5 a form *atɬseu* which by Greeks would have been written ασσευ or αττευ. It is an obvious deduction to see in it, whether it give us the complete word or not, some Case of an ethnicon Ἀσσεύς, meaning 'some one connected with a town *Assos* (or *Asson*).' Was there such a place in Crete? Pliny (4 § 59) mentions *Asum* or *Asium*, and Stephanus of Byzantium gives us Ἄσος πολίχνιον Κρήτης (the single -σ- is not really a difficulty in Stephanus as his orthography varies greatly in this respect: *e.g.* *-ουσσα*, for *-οεσσα*, he sometimes spells *-ουσα*, Λοπαδοῦσσα but Κοχλίουσα; and Κρίσα in Phocis for the more usual Κρίσσα). When he further adds καὶ Ἀσίου Διὸς ἱερὸν ἀρχαιότατον we feel he is supporting Mr. Bosanquet's view that the temple on the 'Altar-hill' of Praesos was sacred to Zeus.

The ethnicon of Assos in the Troad is Ἀσσεύς; so that we have here both in name and suffix another of the remarkable coincidences between the place-names of the Troad and the Eteocretans (*e.g.* Ida, Chryse, see the *Annual* viii. p. 144 f.).

§ 10. A few remaining suggestions, which are made with some reserve, may now be enumerated briefly: the phonetic assumptions they involve have all been discussed at length in the article so often referred to. The most important of these (*l.c.* p. 152), that in Eteocretan the I.-Eu. Velars and Palatals were both preserved as gutturals, seems to me to be now rendered distinctly more probable.

Observe then the following points:

(1) the number of gutturals, *dedikark*, *neikar*, *kles-*, *tarkomn-*.

Here if either *dedikar* or *dikar* should be read as one word it is remarkably like the original 3rd plur. perf. which in Latin is *dicauere*, in Sanskrit *didiçur* (I.-Eu. *dedikr̥*?); and a word of this meaning is in place upon a tablet fixed in a temple.

The final *-k* looks like the first letter of *-ke* of the *barxe*-inscription and irresistibly suggests Lat. *-que*.

So *kles*, an element which appeared in the *barxe*-inscription, suggests the stem of Gr. καλέω, κάλεσ-σον, containing either a palatal or an 'indifferent velar.'

(2) in *neikar*, *-amarφ*, *rairariφ-*, *peirari*, as in *meumarkr* of the *barxe*-inscription, we seem to have the I.-Eu. suffix *-r̥* or *-r̥̄* which appears in Greek and Latin in a very primitive stratum of rustic words (Gr. οὐθαρ, πῖαρ, ἦπαρ, ὕδωρ, σκῶρ, Lat. *calcar*, *boccar*, *lucar*, *instar* (meaning 'scarecrow,' originally, I imagine); *iecur*, *fulgur*; *uber*, *tuber*).

(3) *-sō peirari* looks like a Locative '(ἐν) τούτῳ πείρατι' 'illo limite,' —again a likely signification for an inscription deposited in a temple. But if so we must either suppose (1) that in Eteocretan as in Greek *-eru̯-* became *-eir-* (πετραρ for περϝαρ beside pure Attic πέρας for περϝας), or (2) less audaciously, that the word, like *nomos* in the *nomos*-fragment, had been borrowed from Greek, but declined in Eteocretan fashion, which, if it were borrowed, would be just what we should expect to happen, as one may see from one of the Greek words in Latin (say *bracchium* from βραχίων).

(4) *-φin* looks like the same Homeric case-suffix; if so, the following *sdan* might be some case of the name of *Ianus* or *Diana*,—if initial *di̯-* was treated in Eteocretan as in Greek.

(5) *tarkomn-* shows exactly the same formation as Lat. *Vertumnus*, *alumnus*, whether the Eteocretan form be a name or a participle; and in meaning, if *tark-* = Gr. τρεπ- (Lat. *torqueo*, *Tarquinius*) or τρεκ- (ἀτρεκέως) it might be identical with *Vertumnus*. But as to a precise meaning it is of course useless to speculate in such a fragment.

(6) *eirer-* and *irer-* or *irer* singularly recall the *irere*, *ireirereiet* of the *nomos*- inscription.

§ 11. So far as I can discover there is only one form which raises a doubt as to the tentative phonetic conclusions suggested in the earlier article, namely, *-mam*, which seems to be the end of a word; the difficulty remains even if we took *am* to be a Preposition compounded with '*dedikar*,' because we should still be left with the first *-m*, which would then be final. Either therefore we must modify the hypothesis that final *-m* became *-n* in Eteocretan (*l.c.* p. 150) and separate *epalun* from *ἐπ' ἄλλων*, or suppose that *-mam* contains some (possibly adverbial) elements in which some sound has been lost before (*e.g.* *-s-*) or after (*e.g.* *-p*) the now final *-m*, but which protected it at the time when other examples of final *-m* became *-n*.

R. S. CONWAY.

MANCHESTER, *February* 1905.

ADDENDUM.

May 8, 1905.

After this article had been revised in paged proof, I received an important letter from Prof. R. M. Burrows, M.A., of University College, Cardiff, containing a report of his reading of the three Eteocretan fragments which I had asked him to look through in the Candia Museum. By the kindness of the Editor, I am allowed to subjoin it in full.

With regard to the points raised I should like to say only this. First, that the evidence I have discussed above seems to me to place the value of the sign between T and ≤ almost beyond doubt, whatever its exact form;—and as the T adjoins it so closely, it is quite possible that Prof. Burrows' view of the break may be right in spite of Mr. Bosanquet's support of the text I have printed.[1]

Secondly, as to the interpuncts, I think experienced epigraphists will agree with me in thinking that clear and definite marks which appear in a good 'impression' are far more important evidence than the aspect of the stone-surface to the eye in any one position on any given day. In dealing with Italic inscriptions I found repeatedly that the solid paper-impression enabled one to distinguish clearly between accidental injuries and inten-

[1] [Does this refer to the T form? My final reading was F.—R. C. B.]

tional puncts, where the eye saw no difference whatever. And if the reader will refer to the previous article (in vol. viii) he will find that the evidence of the resulting text in favour of the interpuncts is remarkably strong.

Where an impression fails is of course at the edge of a stone, since the wet paper, when folded tightly round the stone, records marks in a break of the margin or actually on the side quite as faithfully as those on the inscriptional surface. Prof. Burrows' corrections here are particularly valuable.

He reports as follows :

ATHENS, *April* 20.

I have just come back from Crete where I spent some hours over your Inscriptions. I had better send you my Notes at once, as you may wish to make use of them.

THE *Neikar*-INSCRIPTION.

L. 1. *Second sign.* O probable, but not certain.

L. 2. *First sign.* A certain. Cross stroke distinct. At *the end* certainly no sign visible. Stone broken away.

L. 3. *First sign.* *r* almost certain.

L. 5. *First sign.* *e* probable, but not certain.

Eighth sign. F certainly. There is no intentional cutting to the left of the vertical stroke. There *is* an indentation, which may have been made by a break of the stone at the time when the angle was being cut, but it is certainly not a part of the letter. Mr. A. C. Headlam, who was at Candia with me, was also sure of this, but as you have made some remarks on the other hypothesis I asked Mr. Duncan Mackenzie's opinion. He also was sure.

L. 7. *Seventh sign.* Between H and A. I most probable.

L. 10. *Fourth sign.* *M* almost certainly. Quite unlike the F of l. 5 and very like the broken P of l. 8, fifth sign.

L. 12. *First sign.* T certain. You have dotted this in your first text, omitted it by mistake in your second.

Fifth sign. Δ certain.

L. 14. *First sign.* Δ certain. It is printed wrongly in the first text, The stone shows Δ not Δ.

Lastly, there are no interpuncts. I examined all your suggestions singly, and am sure.

The *Nomos*-Inscription.

Your Article § 5. There are no interpuncts. The wearing of the stone is such that there are many indentations. But they occur all over the stone, and there is no doubt that they are not cut. Indeed a better case could be made for interpuncts at places where they could not possibly occur, *e.g.* between the lines, than at any of the points you mention.

§ 7. In all the places mentioned the letter is certainly P.

L. 2. *Third and following signs.* Φ certain. If this is followed by either IA or M there is a half-inch gap. IA (in spite of the photograph) are also improbable, since there is clearly a cut down from left to right after the I which would be unaccounted for. ⋈ of your Section 12 is less improbable in itself, but leaves too much gap. IM or I⋈ are the most probable suggestions I can make. N or M might follow the Φ, but it is difficult to see what would then come before the P. I had thought of X, but there would be then too much gap between it and the P, and an I would not be a possible sign after the X. P is most probable before *ala*. Last sign Y quite possible.

L. 3. *Fifth and sixth signs.* NM most probable. The space seems rather large, but the letters in themselves only take the same space as when they occur in l. 5 (signs 2 and 4), and they have what looks undue space on each side of them, allowing room for the horizontal strokes of the T's that precede and follow. It is this fact that makes the question of gaps a different one from that in l. 2.

Eleventh sign. A certain. There are distinct signs of the crossbar.

L. 4. *Tenth and eleventh signs.* ΦE almost certain.

Seventh sign. Ξ certain.

Last four signs. A certain, fourth from end. N certain, last sign. Second and third (*N.B.* you say third and fourth, p. 129) difficult and doubtful. The photo suggests MY more than the stone. There seems to be a curve to both the top and bottom of the left vertical of the alleged M, and it is also not certain that there

is not a connexion between the left curve of the alleged ϒ and the right vertical of the alleged M. Between A and N there is an inch and a half. The connexion between the two verticals of the alleged M is not certain on the stone, though it is possible. ⋈ would, I think, be impossible.

L. 7. *Seventh sign.* ϕ certain. The vertical is certain within the loop, though it is also certainly *not* above it.

L. 8. *Tenth sign.* P certain.

L. 9. *First sign.* Ꞁ is what is there. Both vertical and horizontal strokes seem rounded. It is not certain, therefore, though probable, that it is I preceded by an accidental stroke.

Seventh sign. P certain.

THE *Barxe*-INSCRIPTION.

I had no time left to go into doubtful points, but in comparing the Transcription on the bottom of your page 132 with the stone I noticed the following slight errors.

Reading, for simplicity, from left to right.

L. 2. *Fifth sign.* Ⱥ *not* A.

Tenth sign. ⱥ *not* ʌ, which could scarcely, as it stands, make an A.

L. 3. *Fifth sign.* ¦ *not* I.

ALTAEGYPTISCHE PFLÜGE, JOCHE, UND ANDERE LANDWIRTSCHAFTLICHE GERÄTE.

Contrary to the usual practice of the *B.S.A.* this paper is printed in German. This exception has been made at the request of the author, in view of the difficulty he foresaw, of rendering the many technical terms by their exact English equivalent.—*Ed.*

Die Aegyptische Abteilung der königlichen museen zu Berlin besitzt seit dem Jahre 1897 einen altaegyptischen Pflug. Da dieser bisher

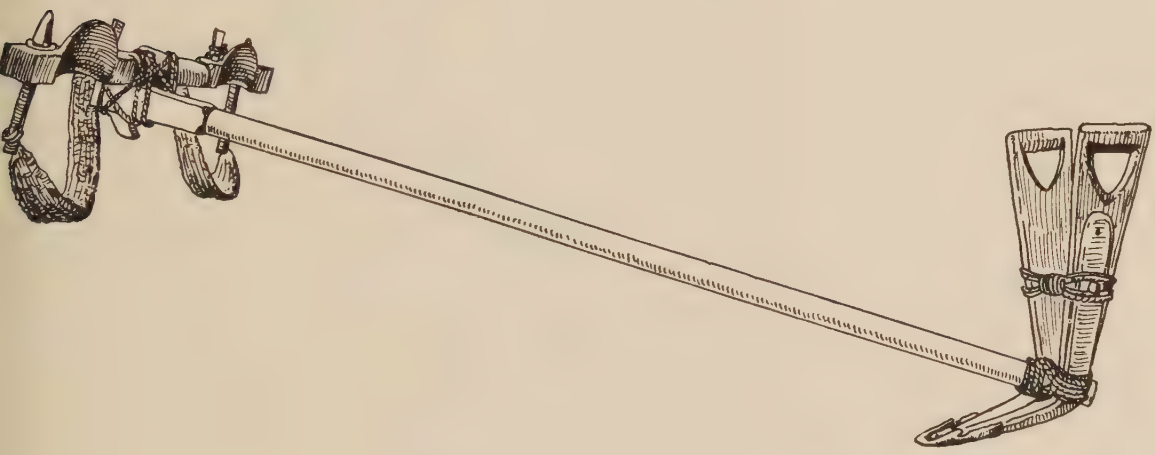


Abb. 1.—Rekonstruktion des Berliner Pfluges.

noch nicht in brauchbarer Form veröffentlicht ist,[1] benutze ich gern die freundliche Aufforderung, ihn hier abzubilden und dabei einiges zu bemerken,

[1] Von dem Pflug ist eine schlechte Abbildung im Ausführlichen *Verzeichnis der aeg. Altertümer* 1899 *S.* 225 enthalten, so wie ich ihn seinerzeit rekonstruiert habe. Das Material zu diesem Aufsatz habe ich 1897 gesammelt und seitdem gelegentlich ergänzt. Die beste der früheren Arbeiten über diesen Gegenstand sind Ermans Bemerkungen in seinem *Aegypten* S. 569 f., wo nur die Erklärung des Pfluges im Grabe des Paheri Lepsius *Denkm. III* 10[a] verfehlt ist. (Die scheinbare Lenkstange ist der ausgestreute Same. In der Publikation des Exploration Fund ist das deutlich.) Auch Masperos Aufsatz *La culture et les bestiaux* etc. in seinen *Études* ist zu beachten.

was mir bei der Durchsicht des in den Museen erhaltenen oder auf Denkmälern dargestellten ähnlichen Materials aufgefallen ist.

Der Pflug stammt aus der bekannten Nekropole von Drah abu-l-negga auf der Westseite von Theben. Genaueres über die Auffindung und das Grab, in dem er gefunden ist, liess sich indessen nicht ermitteln.

Die einzelnen Teile kamen von einander losgelöst in unsere Hände, doch war ihre Zusammensetzung nicht schwer. Das Gesamtbild, das die Rekonstruktion ergab, bietet die *Abbildung* 1, bei der folgende Teile

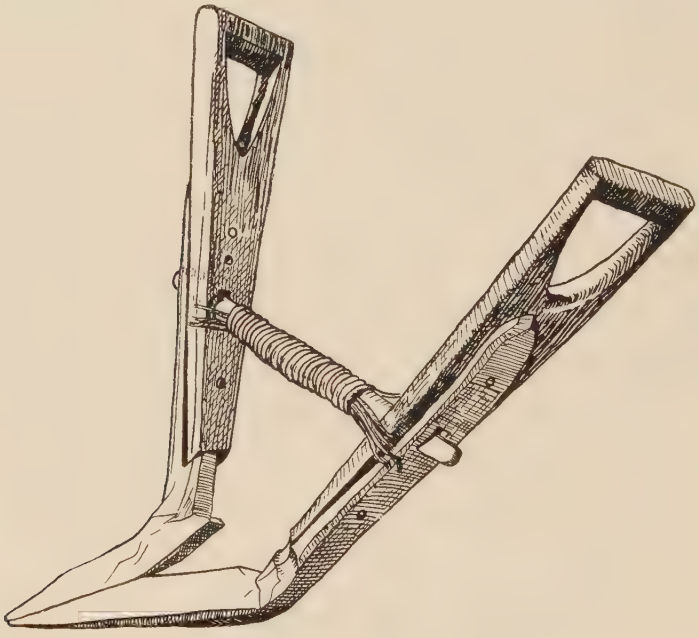


ABB. 2.—SOHLE UND STERZEN DES PFLUGES, BERLIN 13876.

modern ergänzt sind: die Deichsel mitsamt den Riemen, welche sie am Scharteil und am Joch befestigen, die kurzen rechteckigen Pflöcke im Joch, und die Brustgurte.

Der eigentliche Körper des Pfluges (Berlin 13876, *Abbildung* 2) besteht hauptsächlich aus zwei von Natur knieförmig im stumpfen Winkel gebogenen Stücken festen Holzes, die so zusammengefügt sind, dass je zwei Schenkel parallel dicht neben einander liegen, während die andern beiden von einander weg streben. Die parallelen Schenkel, die die Sohle

bilden, sind flach und spitzwinklig zugeschnitten, stellen also eine Schar von der Form eines gleichschenkligen Dreiecks dar, das im Ruhezustand platt auf dem Boden liegt. An den beiden hochstehenden Schenkeln dieser Kniehölzer sind innen mit Holznägeln die Sterzen befestigt, schmale, nach oben sich etwas verbreiternde Brettchen mit steigbügelförmigen Grifflöchern. Die breitesten Flächen der Sterzbretter stehen in der Längsrichtung des ganzen Pfluges.

Die Sterzen werden im richtigen Abstand, der oben 50 cm. beträgt, von einander gehalten durch eine eingezapfte Quersprosse, die das Aufeinanderklappen verhindert. Das Entweichen nach aussen verbietet eine kräftige Umschnürung von Palmbaststricken. Diese liegt in der Höhe der Sprosse, ist erst einfach um die beiden Sterzen herumgelegt, dann aber durch eine dichte Wickelung an die Sprosse herangedrückt und so sehr straff gespannt. Solche Quersprossen zwischen den Sterzen fehlen auf den Denkmälern sehr oft, vor allem fast immer im alten Reiche. Man sieht sie zuerst am Ende des alten Reichs[1] und dann im mittleren Reiche (vgl. *Abbildung* 3). In der 18. Dynastie wird die Zahl der Sprossen oft bis auf vier erhöht (vgl. *Abbildung* 4).

ABB. 3.—PFLUG DER 18. DYNASTIE. SKIZZE NACH *Mém. de la Miss. V.* 476.

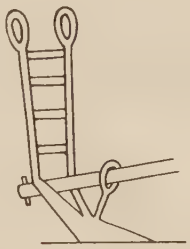


ABB. 4.—PFLUG DES MITTLEREN REICHS NACH *Arch. Surv. of Eg. Berscheh I. Taf.* 31.

Unten am Knie der Scharhölzer zeigen Druckspuren, dass auch hier, wie es ja auch zu erwarten ist, eine Umschnürung gesessen hat. Diese wurde durch mehrere scharf markierte Vorsprünge und Kerbe an ihrer Stelle festgehalten.

Es ist klar, dass diese Umschnürung nicht nur die beiden Hälften der Schar zusammenhalten sollte, sondern dass sie auch die jetzt, und angeblich

[1] Das älteste Beispiel finde ich in der 6. Dynastie (*Arch. Surv. of Eg. Dêr el-Gebráwi Taf. VII*).

auch schon bei der Auffindung, fehlende Deichsel festzuhalten hatte, die gewiss am hinteren Ende durch einen Pflock gegen das Herausrutschen gesichert gewesen ist. Die Denkmäler zeigen diese Umschnürung und den Pflock oft recht deutlich (vgl. *Abbildung* 4 und 10). Das vordere Ende der Deichsel muss, wie die Bearbeitung des Joches zeigt, oben flach geschnitten gewesen sein, und ausserdem ebenfalls einen nach unten gerichteten Pflock oder nasenähnlichen Vorsprung getragen haben. Auf den Denkmälern reicht die Deichsel oft nur bis etwa in die Mitte der Körper der Zugtiere. Durch das Deichselende ist dann ein Pflock gesteckt und um diesen ein Seil geschlungen, das von der Deichsel zum Joch führt (vgl. *Arch. Surv. of Eg. Sheikh Said Taf. xvi.*). Auf solche Vorrichtung ist vielleicht das unten zu erwähnende Joch aus Abusir (vgl. *Abbildung* 6) eingerichtet. Auf den Denkmälern sind Deichsel und Strang oft so gezeichnet, als lägen sie an der Aussenseite der Tiere, statt zwischen ihnen ; doch das ist nur eine Ungeschicklichkeit der alten Zeichner.

Während die Sohlen- und Sterzenhölzer recht roh zugehauen sind, weist das Joch (Berlin 13877, vgl. *Abbildung* 5) verhältnismässig saubere

ABB. 5.—NACKENJOCH. BERLIN 13877. DIE RECHTECKIGEN PFLÖCKE UND DIE BRUSTGURT. ERGÄNZT.

Arbeit auf. Es ist in seinem mittleren Teil oben abgerundet, an den Enden jedoch viereckig. Auf den viereckigen Enden sitzt je ein halbkreisförmiger Schild, aus demselben Stück Holz gearbeitet wie der Jochbaum. Diese Schilde dienen dem Nacken des Zugtieres als Widerlager. Daher ist hier die untere hintere Kante des Jochbaumes kräftig abgerundet und die Hinterseite der Nackenschilde leicht ausgehöhlt.

Rechts und links von den Schilden liegt je ein Loch, und zwar innen je ein, rechteckiges, aussen je ein rundes. In jedem der runden Löcher steckt ein langer hölzerner Bolzen mit kegelförmigem Kopf und einem Loch am unteren Ende. Zwischen den Jochbaum und den Bolzenkopf ist eine Lederscheibe eingeschoben. In das Loch im Ende des Bolzens war ein jetzt verlorener Riemen fest eingeknüpft, der als breiter Gurt unter dem Hals des Tieres auf der Brust hindurchlief und auf der anderen Seite in dem rechteckigen Loch festgeknüpft oder um einen kurzen Pflock geschlungen war, der in dem Loch steckte, aber jetzt verloren ist. Die ganze Vorrichtung ist, wenn wir den rechteckigen Pflock annehmen, genau so wie man sie noch heute in Aegypten oft sehen kann.

Die Mitte des Joches trägt einen aus demselben Holze gearbeiteten nach vorn gerichteten Vorsprung vom selben Querschnitt wie der mittlere Teil des Jochbalkens. Er diente zur Befestigung auf dem vorderen

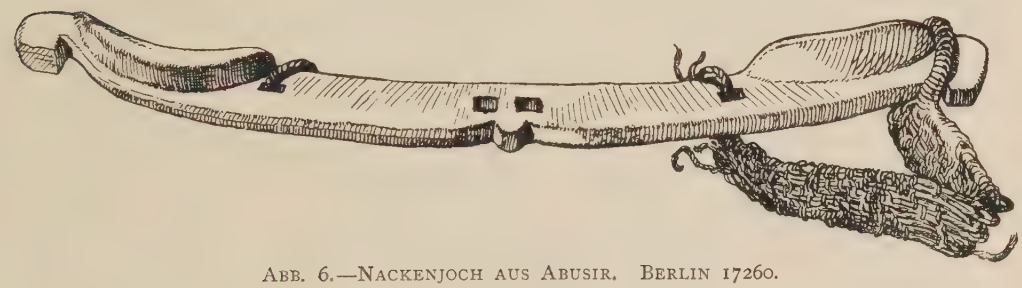


ABB. 6.—NACKENJOCH AUS ABUSIR. BERLIN 17260.

Ende der Deichsel. Man sieht an dieser Stelle deutliche Druckspuren einer Kreuzwickelung.

Ein zweites ganz ähnliches Joch, angeblich aus demselben Funde, (Berlin 13878) befindet sich in Berlin. Es ist etwas schwerer gearbeitet, dabei aber etwas kürzer, die Lederscheiben fehlen und die Bolzenköpfe sind flacher. Ein drittes gleiches kenne ich aus der unvollkommenen Abbildung bei Wilkinson, *Manners and Cust.* 1841 iv, 42.[1] Es befand sich damals in der Sammlung Anastasi. Ein viertes, etwas abweichendes, ist bei den Grabungen der Deutschen Orientgesellschaft in Abusir gefunden,[2] und befindet sich ebenfalls in Berlin (Berlin 17260 vgl. *Abbildung* 6). Bei ihm sind die Pflöcke und Bolzen durch einfache Verknotung

[1] Das andere Gerät, das Wilkinson a. a. O. mit dem Joch in Verbindung bringt, hat wohl mit dieser Art Joch nichts zu thun.

[2] Vgl. *Mitteilungen* der Deutschen Orientgesellschaft 24 S. 22.

überflüssig gemacht und die Verbindung mit der Deichsel ist, wie oben erwähnt, etwas anders. Die Brustgurte sind hier erhalten. Das Ganze ist viel roher gearbeitet.

Die hölzerne Schar unseres Pfluges war gewiss mit Metall beschlagen. Der in *Abbildung* 7 wiedergegebene, 13 cm. lange, eiserne Schuh (Berlin

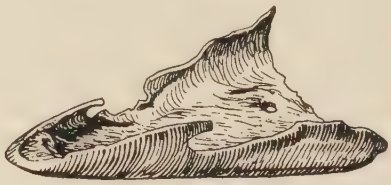


ABB. 7.—EISERNER SCHARBESCHLAG AUS GEBELÊN. BERLIN 13687.

13687) gehört nicht zu diesem Pfluge, denn er ist angeblich in Gebelên gefunden, hat aber doch ganz die Form, die wir für den Beschlag unserer hölzernen Schar verlangen müssen. Nur das deutlich erkennbare Nagelloch wäre bei einem gespaltenen Scharholz wie das unseres Pfluges ist, schwer unterzubringen. Der Nagel sässe ja grade in der Fuge. Jener zweite Pflug muss also ein ungeteiltes Sohlenholz gehabt haben. Ob die offene Seite des Beschlages oben oder unten lag bleibt unsicher, doch ist das erste wohl wahrscheinlicher.

Das Bild, das uns dieser Pflug bietet, ist ausserordentlich einfach, doch stimmt es durchaus zu dem, was wir von den Denkmälern her kennen. Es ist ein simpler Haken, der die Erde nur leicht ritzt, und noch nicht darauf eingerichtet ist, sie zu wenden. Für guten aegyptischen Boden genügt das ja auch, und der Pflug des heutigen Fellachen steht noch immer auf derselben Stufe. Am alten Pflug ist Pflugbaum und Deichsel eins. Ein Pflugmesser (Kolter), das, unmittelbar über der Spitze der Schar schräg im Baume steckend, die Erde vorschneidet, findet sich noch nicht, so nahe der Gedanke lag, durch Einfügung eines solchen Gliedes den starken Druck zu mildern, der sich gegen das Gelenk zwischen Sohle und Baum richtete. Nur ein Relief ist mir bekannt, bei dem man ein Pflugmesser sehen könnte. Es ist die unter *Abbildung* 8 reproduzierte Darstellung aus der Zeit Amenophis IV (Prisse, *Mon. Taf.* 35). Es hat auch sonst so mancherlei Absonderlichkeiten, dass wir noch öfter darauf zurückkommen müssen, und es lohnte wohl, wenn Jemand den angeblich im Chonstempel in Karnak verbauten Block auf die Richtigkeit der Zeichnung hin prüfte.

So einfach der Pflug aber ist, wie wir ihn als Ganzes in *Abbildung* 1 rekonstruiert haben, so hat er doch verschiedene Eigentümlichkeiten, die ein näheres Eingehen verdienen.

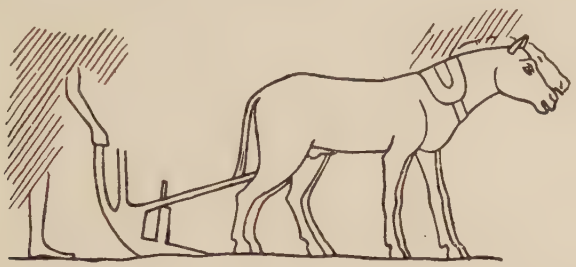


ABB. 8.—PFLUG MIT MAULTIEREN NACH PRISSE, *Mon.* 35. ZEIT AMENOPHIS IV.

Besonders auffällig ist vor allem die erstaunliche Niedrigkeit der Sterzen, die kaum 55 cm. hoch sind, also grade bis zur Höhe eines Männerknies reichen. Aber die alten Reliefs bestätigen uns diese Eigentümlichkeit, wie das unter *Abbildung* 9 gezeichnete Relief aus dem alten Reiche

ABB. 9.—PFLUG DES ALTEN REICHS UND ARBEITER MIT DER HACKE. NACH *Baedeker* 1902, *S.* 148.

zeigt. Der unten zu erwähnende aegyptische Pflug aus römischer Zeit ist ja fast noch niedriger als der unsere.[1]

Anstoss könnte auch die schlechte Verbindung zwischen der Deichsel und der Sohle erregen. Aber auch dafür haben wir viele Beispiele, vor allem aus dem alten Reiche (vgl. *Abbildung* 9), und grade die Beweglichkeit, die die Schar durch diese Befestigung bekam, wird man als einen Vorteil empfunden haben. Durch Heben oder Niederdrücken der Sterzen konnte die Schar sehr leicht zum Tiefer- oder Flachgehen gebracht werden. Immerhin aber liegt es in der Natur der Sache, dass die Schar beim Pflügen beständig die Neigung zeigte sich senkrecht zu stellen oder

[1] Die Höhe wechselt zwar im Laufe der Zeit etwas, und besonders im neuen Reiche steigert sie sich etwas, aber im Durchschnitt herrscht die sehr niedrige Form (vgl. Erman a. a. O.)

wenigstens zu tief zu gehen, so dass der Pflüger fortwährend einen kräftigen Druck auf die Sterzen ausüben musste. Um diese Neigung der Schar in der richtigen Grenze zu halten, hat man sich durch Einfügung eines neuen Konstruktionteiles geholfen. Man verlängerte die Sohle des Pfluges und legte dicht hinter die eigentliche Schar einen kurzen Strang, der zum Pflugbaum hinaufführt (vgl. *Abbildung* 4). Da dieser Strang nicht, wie die Verbindung zwischen den Sterzen, einen Kern aus Holz hatte, sondern nur aus Stricken bestand (vgl. *Abbildung* 10, nach Rosellini

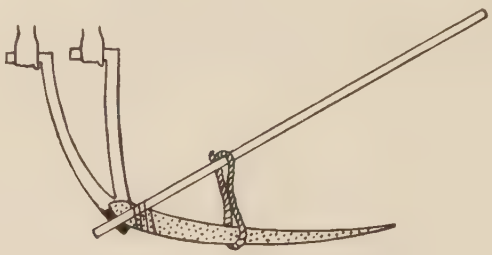


ABB. 10.—PFLUG DES MITTLEREN REICHS NACH ROSELLINI, *Mon. Civ.* 32, 5.

Mon. Civ. 32), war damit nur ein Ausgleiten der Schar nach unten verhindert, während es immer noch möglich war sie etwas flacher zu drücken. An unserem Pfluge ist keine Spur eines solchen Verbindungstranges zu sehen und auch keine Stelle, an der er denkbar wäre. Dieser Strang findet sich gelegentlich schon auf den Reliefs der 3. Dyn. in Medûm (vgl. Petrie, *Medûm Taf.* 18), häufiger aber erst vom Ende des alten Reiches ab. Zur Datierung ist sein Fehlen oder Vorkommen also nicht zu benutzen.

Eine weitere Eigentümlichkeit des Berliner Pfluges ist die ausserordentliche Kürze der Joche. Während das von Wilkinson abgebildete rund 145 cm. lang ist, misst von unseren Berliner Jochen das grössere nur 104 cm., das kleinere nur 99 cm., das in Abusir gefundene gar nur 96 cm. Ich weiss nicht, ob diese Maasse es noch möglich machen an Rinder oder Pferde als Zugtiere zu denken, und ob man nicht viel mehr an Esel denken muss, obgleich wir auf den Denkmälern nie Esel unter dem Pfluge gehen sehen. Beweiskraft kann man dem Schweigen der Denkmäler nicht beimessen, vor allem da es sich hier, wie wir sehen werden, um die Zeiten nach dem Ende des neuen Reiches handelt. Auf den Denkmälern sind es

immer Rinder, die den Pflug ziehen, und nur einmal, in unserer *Abbildung* 8, finden wir Maultiere vorgespannt. In einem Märchen des neuen Reichs werden sogar Pferde am Pfluge erwähnt.[1]

Was die Form des Joches betrifft, so wird jedem, der aegyptische Denkmäler auf solche Fragen hin durchmustert hat, aufgefallen sein,[2] dass die Rinder, wo sie zum Ziehen von Pflügen oder Schleifen gebraucht werden, fast stets Hörner- oder Stirnjoche tragen, während Nackenjoche in der Art wie die unseren so gut wie nie vorkommen. Vor der Zeit des neuen Reiches ist ja das einzige Zugtier der Aegypter das Rind, und zwar das *gehörnte* Rind, und für dieses ist das einfache, an die Hörnerwurzeln gebundene Joch, das eigentlich aus nichts weiter als einer kräftigen Stange besteht (vgl. *Abbildung* 11), so natürlich und rationell, dass ich glaube, es

ABB. 11.—HÖRNERJOCH NACH *Arch. Surv. of Eg. Sheikh Said Taf.* 16.

ist diesmal kein Zufall, dass uns weder im Original noch auf den grade für diese Zeit sehr beredten Denkmälern ein Nackenjoch aus der Zeit vor dem neuen Reiche erhalten ist. Gewiss ist die nationale aegyptische Jochform das Stirn- oder Hörnerjoch. Wiederum wird man, eben weil man nur das Hörnerjoch kannte, nicht auf den Gedanken gekommen sein, hornlose Tiere einzuspannen. Anders wurde das mit dem Beginne des neuen Reiches. Als die Aegypter damals das Pferd als Zugtier kennen lernten und einführten, mussten sie mit dem Tiere zugleich auch die neue Bespannungsart aus der Fremde übernehmen, das Joch, das auf dem Nacken und der Brust ruht, also das Joch wie wir es von den Streitwagen her kennen. Bei den Rindern wird man noch lange

[1] Grade mit Rücksicht auf die Maultiere in *Abbildung* 8 sehe ich keinen Grund, warum man daran zweifeln soll, wie es Erman a. a. O. thut, dass im Papyrus d'Orbiney mit ƧTΨΨP wirklich Pferde gemeint sind. Kuriosa sind die von Menschen gezogenen Pflüge Lepsius, *Denkm. III*, 10ª (Dyn. 18) und Wilkinson *The Egypt. in the time of the Pharaohs.* London 1857 S. 72, angeblich nach einem Relief der 18. Dyn. im Louvre.

[2] Vgl. Maspero a. a. O.

bei dem alten, primitiven, aber eigentlich praktischeren, Hörnerjoch geblieben sein. Daneben aber wird man schon früh der neuen Mode gefolgt sein, zumal man nun die Möglichkeit hatte auch hornlose Tiere einzuschirren. So sehen wir ja die Maultiere in *Abbildung* 8 den Pflug ziehen, und im Grabe des Hui, ebenfalls aus der 18. Dynastie, hornlose Rinder vor den Wagen einer Negerprinzessin gespannt (Lepsius, *Denkm. III* 117). Zeigt in diesen beiden Fällen das Nackenjoch noch deutlich seine Herkunft von dem eleganten Pferdegeschirr, so hat sich der Bauer für seine Zwecke eine plumpere Form gebildet, die aber auch ihre Zwecke erfüllt, eben die Jochform die unsere *Abbildungen* 5 und 6 zeigen. Dieses Nackenjoch kann also schon seit dem Anfange des neuen Reiches in Aegypten existiert haben. In der That finden wir es in einigen Fällen seit der 18. Dynastie wirklich auf den Denkmälern. Das älteste Beispiel ist das bekannte Relief aus den Steinbrüchen von Jura unter Amasis I, in welchem syrische Gefangene Steine auf Schleifen transportieren (zu kombinieren aus Lepsius, *Denkm. III*, 3 und Vyse, *Pyramids*, *Maasara Quarries Tablet*, No. 6). Auch die Ochsenwagen der Feinde Ramses III. Wilkinson, *Manners etc.* 1842 *I S.* 369 = Rosellini, *Mon. stor.* 128) werden am Nackenjoch gezogen. Aber nicht nur bei Ausländern treffen wir es im Gebrauch, sondern auch beim aegyptischen Bauern, wie das Turiner Totenbuch des Neb-hapet beweist (Vgl. Lanzone, *Dizionario die Mitologia Taf. V* = Maspero, *Hist. I. S.* 192). In allen drei Fällen ist es leider so flüchtig und schematisch gezeichnet, dass wenig mehr als der Brustgurt zu erkennen ist und vieles unklar oder unsicher bleibt. Bemerkt sei übrigens, dass die eingespannten Rinder in den beiden ersten Darstellungen kurze, in der letzten aber stattliche lange Hörner tragen. Wenn das Nackenjoch auch auf den späteren Denkmälern so selten dargestellt wird, so beweist das bekanntlich nichts. Denn vom Ende des neuen Reiches an geben die Denkmäler, die für die Geschichte der Gerätformen usw. bis dahin so reichliches Material liefern, für solche Fragen kaum noch etwas aus. Denn einerseits nehmen die religiösen und schematischen Darstellungen immer mehr überhand, andrerseits weiss man, wo sich scheinbar Bilder aus dem Leben finden, nie, ob die Geräte wirklich so gezeichnet sind, wie sie in der Zeit waren, oder ab die leidige Sucht zu archaisieren auch hier ihr Spiel treibt.

Jedenfalls aber ergiebt sich aus dem Gesagten, dass ein Nackenjoch, das in Aegypten gefunden ist, also auch unser Pflug, nicht älter sein kann

als frühestens aus dem Anfange des neuen Reiches, aus der Zeit nach der Einführung des Pferdes.[1]

Auf dasselbe Ergebnis führt für unseren Pflug auch die Betrachtung der Sterzen. Denn während im ganzen alten und mittleren Reiche die Sterzen nur in mehr oder weniger handgerecht gebogene Griffe auslaufen (vgl. *Abbildung* 9 und 10), finden sich, wie Erman bemerkt hat, Grifflöcher in den Sterzen erst seit dem Anfange des neuen Reiches (vgl. *Abbildung* 3).

Wenn wir so durch genaue Betrachtung unseres Pfluges für seine Entstehungszeit eine obere Grenze sehen konnten, so ist damit auch alles gegeben, was wir für seine Datierung sicher sagen können. Bei der grossen Stabilität der Gerätformen in Aegypten dürfen wir an und für sich sehr weit über diese Grenze mit unserem Pfluge hinabgehen. In der That zeigt ja auch ein Pflug, der in einem römischen Hause in Harît (Theadelphia) im Faijûm gefunden ist, und sich jetzt im Museum von Kairo befindet (vgl. *Abbildung* 12, nach der leider sehr dürftigen *Abbildung* in

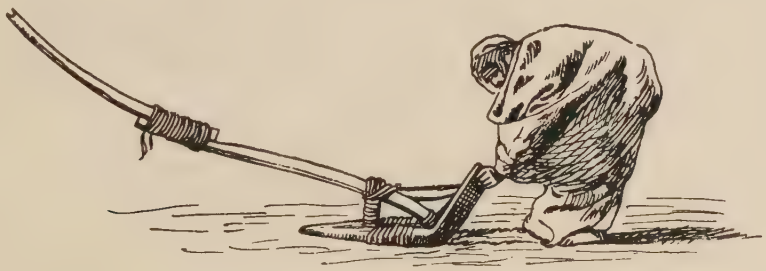


ABB. 12.—PFLUG DER RÖMISCHEN ZEIT AUS HARÎT IM FAIJUM. NACH *Fayûm Towns Taf. IX.*

den *Fayûm Towns Taf.* 9), eine grosse Ähnlichkeit mit dem unseren. Doch ist damit keineswegs behauptet, dass auch unser Pflug aus römischer Zeit stammen müsste. Während der Pflug in Kairo aus einem Wohnhause kommt, sind unser Pflug und das Joch der Sammlung Anastasi in Nekro-

[1] Natürlich gilt die Behauptung, dass das Nackenjoch eng mit dem Pferde zusammenhängt, eben nur für Aegypten. Das koptische Wort für Joch lautet ⲛⲁϩⲃ und hängt augenscheinlich mit ⲛⲁϩⲃⲉ Nacken zusammen. Wenn das richtig ist, könnte das Wort ⲛⲁϩⲃ 'Joch' nicht älter sein als der Anfang des neuen Reichs. Wie das alte Hörnerjoch hiess wissen wir nicht. Den in der hebraeischen Poesie so beliebten bildlichen Gebrauch des schwer lastenden Nackenjoches kenne ich aegyptisch nicht.

polen gefunden. Da nun die Gräber der griechischen und römischen Zeit nicht mehr so wie die älteren mit vielen grossen weltlichen Beigaben ausgestattet zu sein pflegen, würde ich eher dazu neigen, unseren Pflug, und das Anastasische Joch für wesentlich älter zu halten. In der That scheint ja auch das Joch aus Abusir aus der saïtischen Zeit zu stammen.[1] Nichts hindert übrigens, mit unserem Grabfunde noch näher an das neue Reich heranzugehen. Künftige Funde müssen hier Klarheit schaffen.

Mit dem Pfluge zusammen sind nun noch einige andere Geräte, die auch dem Ackerbau dienten, in das Berliner Museum gelangt.

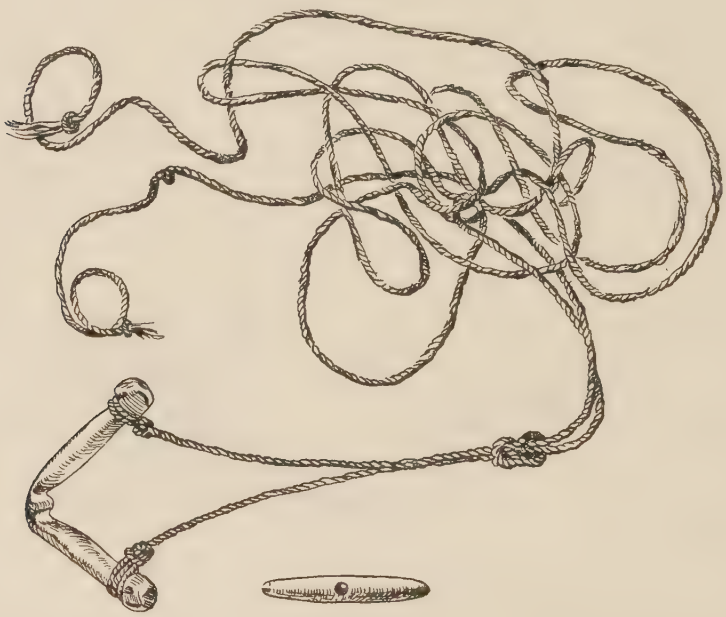


ABB. 13.—STRANG, BERLIN 13879, UND DAZUGEHÖRIGER KNEBEL, BERLIN 13686.

Sicher zu dem Funde, der den Pflug enthielt, gehört ein kleiner hölzerner Winkel aus natürlich gebogenem Holz, an dessen etwa 10 cm. lange Schenkel zwei Leinen aus Palmbast von etwa 2,50 Länge und 1 cm. Dicke geknüpft sind. Sie sind etwa 25 cm. von dem Holzstück zusammengeknotet und jede einzelne ist am Ende durch einen Knoten gegen Aufdröseln gesichert (Berlin 13879, vgl. *Abbildung* 13). Der Scheitel des Holzwinkels ist innen stark ausgenutzt, als ob hier zwei Seile lange Zeit

[1] *Mitteilungen* d. Deutsch. Or. Gesellsch. a. a. O.

gerieben haben. Ganz ähnliche Stücke sind auch im Faijûm und zwar in römischen Häusern gefunden (*Fayûm Towns Taf.* 17). Zu diesem Strang, oder was es sonst sei, soll angeblich ein kleiner durchbohrter hölzerner Knebel (Berlin 13686, vgl. *Abbildung* 13) von 11 cm. Länge gehören.

Bei den im Folgenden genannten Stücken ist die Zugehörigkeit zu demselben Funde nicht ganz so sicher, aber doch sehr wahrscheinlich. Jedenfalls kommen sie auch aus der Nekropole von Drah abu-l-negga.

Es sind zwei Schleifen (Berlin 13881), die offenbar zum Transporte von Kornsäcken gedient haben. Eine jede besteht (vgl. *Abbildung* 14)

ABB. 14.—HÖLZERNE SCHLEIFE. BERLIN 13881.

aus zwei so gut wie unbearbeiteten, fast rechtwinklig gebogenen Stücken Holz, die durch eingezapfte und verdübelte Quersprossen, zwei in jedem Schenkel, verbunden sind. Die eine Seite, die auf dem Boden lief, ist roh geglättet und durch den Gebrauch abgeschliffen. An der oberen Sprosse der rund 35 cm. hohen aufrecht stehenden Seite sitzt bei der einen der beiden Schleifen noch ein Stück des Palmbaststrickes, der zum Ziehen diente, und der das Holz stark abgenutzt hat.

Ferner ist mit dem Pfluge zusammen erworben ein grosser ovaler aus Palmbast geflochtener Korb (Berlin 13885, vgl. *Abbildung* 15) von etwa 50 cm. Länge. Seine eine Längswand steht normal aufrecht, während die andere wagerecht heruntergeklappt ist. Auf der vorderen, heruntergeklappten Hälfte ist der Rand durch einen aufgeflochtenen Saum verstärkt,

den die hintere Hälfte nie gehabt hat. Nach der Angabe des eingeborenen Verkäufers diente der Korb zum Reinigen des Weizens und auch L. Borchardt schrieb mir seinerzeit, dass er ein ganz ähnliches Werkzeug noch heute beim Reinigen des erdroschenen Getreides von Nilschlammstückchen usw. in Thätigkeit gesehen habe.[1]

ABB. 15.—WORFELKORB. BERLIN 13885.

Damit wären alle Geräte besprochen, die zu diesem interessanten thebanischen Funde von Ackergeräten gehören. Das Bild vom Arbeitszeug eines altaegyptischen Bauern, das er uns gewährt, bliebe aber allzu unvollständig, wenn wir nicht noch zweier anderer wichtiger Geräte gedächten.

Da ist vor allem das Werkzeug zu nennen, das die Arbeit des Pfluges ergänzt und auf leichtem Boden oft allein verrichten muss, die Hacke. Ihre Form ist für Aegypten gradezu charakteristisch. Ein rund 65 cm. langer hölzerner Schaft, in den in sehr spitzem Winkel ein breites hölzernes Blatt fest eingelassen ist. Eine Palmbastschnur, die aussen um das Blatt herumgeschlungen oder durch zwei in ihm befindliche Löcher hindurchgezogen ist, verbindet Blatt und Stiel noch besonders.[2] Unter den vielen Exemplaren, die das Berliner Museum besitzt, sind zwei Arten vertreten (vgl. *Abbildung* 16); die eine mit spitzem (Berlin 7103, aus der

[1] Ein verwandtes Gerät ist vielleicht auch mit dem rechteckigen Kasten gemeint, der im alten Reich (z. B. Lepsius, *Denkm. II* 9 *und* 47) zum Reinigen des Korns gebraucht wird, wenn er nicht etwa wirklich ein Sieb vorstellt, wie Erman meint.

[2] Unter den Zeichen der Hieroglyphenschrift befindet sich eins, das nur spät vorkommt und eine ähnliche Hacke, aber ohne die Schnur, darzustellen scheint, das Zeichen hat den Lautwert *ḫn*. Im Gebrauch jedoch kann ich eine solche Hacke nicht nachweisen, und es wäre möglich, dass er nur eine Verunstaltung der vollständigen Hacke ist.

19. Dyn.), die andere mit rundem Blatt (Berlin 7104).[1] An die Stelle des spitzen flachen Blattes tritt oft ein einfaches Rundholz. Dass diese Verschiedenheit der Blätter kein Zufall ist, zeigen die zahlreichen Totenfiguren, die bekanntlich dem Verstorbenen ins Grab mitgegeben wurden, um auf den Äckern des Jenseits die Arbeit für ihn zu verrichten, und die deshalb ausser den Säckchen für Saatgetreide zwei Hacken in den Händen halten. Auch sie tragen immer zwei verschiedene Arten von Hacken, eine spitze und eine breite (vgl. *Abbildung* 17, Berlin 4392). Es ist interessant zu

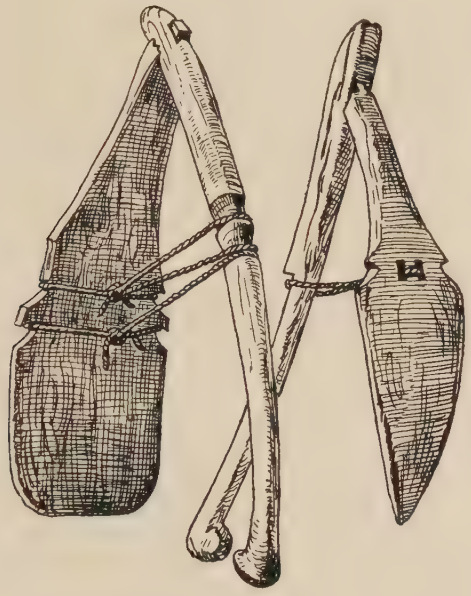


ABB. 16—HÖLZERNE HACKEN. BERLIN 7103 UND 7104.

sehen, dass diese beiden Hacken auf den Figuren des neuen Reiches ersichtlich beide noch die alten hölzernen Werkzeuge sind, während auf den Totenfiguren der Spätzeit an die Stelle der breiten hölzernen Hacke offenbar eine andere tritt mit einer Metallklinge, die sie vollkommen dem heutigen Allerweltswerkzeuge des Fellachen, dem *fâs* oder der *tûrije* ähnlich macht (vgl. *Abbildung* 18, Berlin 4512). Die Arbeit mit den Hacken zeigt die *Abbildung* 9.

[1] Erman weist darauf hin, dass in einer Darstellung des alten Reichs bei Lepsius, *Denkm. II* 56[a] zweizinkige Hacken vorzukommen scheinen. Doch ist wohl erst das Original des Reliefs nachzuprüfen.

Weiter ist das kleine unscheinbare Werkzeug zu nennen, das eine ganz ähnliche Arbeit zu verrichten hat wie der oben beschriebene Korb.

ABB. 17.—TOTENFIGUR DER ÄLTEREN ZEIT. BERLIN 4392.

ABB. 18.—TOTENFIGUR DER SPÄTZEIT. BERLIN 4512.

Es sind die schlichten, etwa 35 cm. langen, paarweise zusammengehörigen Worfelhölzer, von denen wir in Berlin mehrere Exemplare besitzen (vgl.

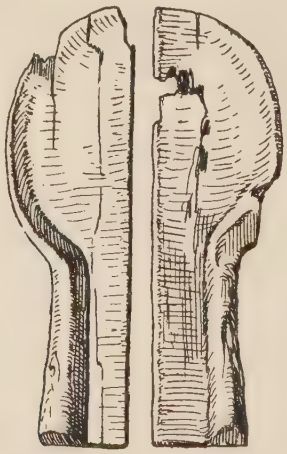


ABB. 19.—WORFELHÖLZER. BERLIN 10773. 12478.

Abbildung 19, Berlin 10950, 12478, das erste, in der Abbildung rechts stehende, aus Dyn. 12). Bei der Arbeit zeigt sie die *Abbildung* 20 (nach

einen Relief der 8. Dyn.).[1] Ihre Form scheint sich von den ältesten Zeiten bis in die Spätzeit hinein im wesentlichen stets gleich geblieben zu sein.

Nennen wir dazu noch einen Eselsattel (Berlin 789) und rohe Kornmaasse (Berlin 13893, 13894), einen Messstrick (Berlin 797), die hölzernen, Kinnbacken ähnlichen, Sicheln mit Feuersteinschneiden, die erst

ABB. 20.—WORFELN. NACH *Eg. Expl. Fd. Taheri Tav. III.*

nach der 18. Dyn. durch metallne ersetzt werden, Säcke aus Leder (Berlin 13711) oder aus Palmbast (Berlin 795), Besen verschiedener Form, und vergessen wir nicht, dass das hohe Schwengelgerüst des Schadûfs schon mindestens seit der 18. Dynastie ebenso ein Wahrzeichen des aegyptischen Ackerbaus gewesen ist, wie heutzutage, so haben wir ein wohl ziemlich vollständiges Bild von dem Aussehen der treuen stummen Gehülfen des altaegyptischen Bauern.

HEINRICH SCHÄFER.

[1] Vgl. auch *Zeitschr. f. aeg. Spr.* 37 *S.* 85.

NOTE ON THE MYSTICA VANNUS IACCHI.

By the kindness of the Editor of the *Annual* I am allowed to append to Dr. Schäfer's paper a brief note on two monuments representing *likna* which came to my knowledge[1] too late for publication in my last article in the *Hellenic Journal*[2] on the *Mystica Vannus Iacchi.*

Dr. Schäfer's paper is naturally to me of great interest and importance. Egypt has yielded what would have been vainly sought for in Greece, namely an *actual ancient liknon* of precisely the shape so far evidenced only by representations in ancient art and by modern specimens. Mr. Bosanquet wrote to me last year from Berlin to tell me of the existence of such a *liknon;* and its publication by Dr. Schäfer in Fig. 15 of his paper makes further comment unnecessary.

1.—Fragment of a Hellenistic Relief now in the Private Collection of Dr. P. Hartwig[3] at Rome (Fig. 1.).

The fragment in question appears at first sight somewhat enigmatic. The slender pillar tapering slightly downwards and surmounted by a veiled *liknon* are by this time familiar. We have here, as frequently on Hellenistic reliefs, the *liknon erected.* The pillar in this particular instance is of interest because it is much simpler than the small and elaborate structures that frequently support the *liknon.* This simple pillar differs but little

[1] My attention was drawn to both monuments by Mr. Alan Wace of the British School at Rome, and he kindly obtained for me the photograph of the Lateran Herm (Fig. 3) and the detailed drawing of the *liknon* (Fig. 4).

[2] *J.H.S.* xxiii. p. 305, and xxiv. p. 241.

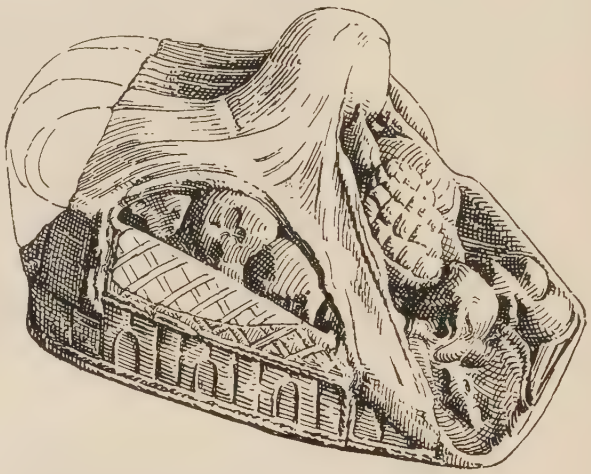
[3] Published by his generous permission.

FIG. 1.—FRAGMENT OF A HELLENISTIC RELIEF IN THE COLLECTION OF DR. HARTWIG.

FIG. 2.—HELLENISTIC RELIEF IN VIENNA MUSEUM.

from its ancestor, the baetyl-pillar which, as Dr. Arthur Evans [1] has noted, supports beneath the altar table of the Cyrenaica a liknon-shaped 'offertory-basket.' Like the Mycenaean column it tapers downwards. But what of

FIG. 3.—TERMINAL FIGURE OF PAN WITH LIKNON.



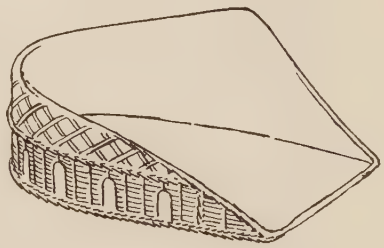


FIG. 4.—ENLARGED DRAWING OF LIKNON.

the Eros? As the *liknon* was used in marriage-processions, it is at first sight tempting to see in the figure of Eros a symbolic significance. Com-

[1] *Mycenaean Tree and Pillar Cult*, xxi. p. 115, Fig. 9.

parisons with another Hellenistic relief[1] show however that though such symbolism doubtless existed at the outset, it is by Hellenistic days worn very thin. On the design in Fig. 2 from the obverse of a double relief in Vienna we see the same slender column and the same Eros, and scattered about are a series of Bacchic attributes, the lyre, masks, tympanon, thyrsos. Eros and Dionysos are too normal a conjunction to call for comment.

2.—TERMINAL FIGURE OF PAN CARRYING LIKNON AND CHILD, IN THE LATERAN[2] MUSEUM (FIG. 3).

In Fig. 1, the fragment of a Hellenistic relief, we have seen a survival of an ancient ritual appliance, a pillar supporting a *liknon*. In the statue of the Lateran Museum, the pillar has taken on human shape, has become a 'Herm,' the *liknon* is carried in a human hand—the shape is clearly seen in the enlarged drawing (Fig. 4). A veil is thrown over the phallos. Some of the fruits are plain enough, specially a large fir-cone; the basket-work pattern with the arch-shaped apertures is precisely paralleled in the *liknon* on the Hellenistic relief in Munich.[3] Fortunately the *liknon*—save for the small portion shown in the drawing as restored—is unquestionably antique.

As to the child it is usually called Dionysos, but as the bunch of grapes in the left hand of the 'Pan' is modern, the attribution is uncertain. In view of the symbolism of the *liknon* I think the child is more probably attributive with a reminiscence of Eros. In Hellenistic days any human child was apt to be figured as Eros. In this particular case the child is wingless, but then so is the child in the Vienna relief (Fig. 2).

The 'Herm' carrying the *liknon* is explained by the pillar surmounted by the *liknon*. The conjunction of the two looks back to the ancient days of baetyl-worship and persists with the tenacity of an immemorial ritual tradition.

JANE E. HARRISON.

[1] Schreiber, *Hellenist. Reliefbilaer*, xcviii[a].

[2] Helbig 636, in which the portions restored are noted. The figure has been already published in outline, Reinach, *Répertoire de Stat.* ii. 525, No. 7.

[3] Schreiber, *op. cit.* lxxx., and see *J.H.S.* xxiii. p. 297, Fig. 5.

NOTE ON THE FRAGMENT OF A PAINTED PINAX FROM PRAESOS.

(Plate III.)

On p. 240 *sqq.* of the *B.S.A. Annual*, vol. viii., Mr. R. C. Bosanquet has described a tomb opened by him at Praesos during the excavations of 1901. The tomb had originally been of the 'beehive' type though the upper portion had been broken before the excavators opened it. The layer of earth constituting the original floor of the tomb was covered to a depth of nearly two feet with a tightly packed deposit of broken pottery, whilst in a small vestibule leading into the tomb from the dromos a few better preserved vases were found. Owing to the confusion caused by the later use of the tomb and by the fall of the roofing stones it is difficult to make out any stratification in the deposit, but on the analogy of the Menidi tomb Mr. Bosanquet would explain the large quantity of pottery found here as the result of a long period of hero-worship. The bulk of the pottery is of the Geometric period and comprises a sequence of at least several generations. Nothing of indisputably Mycenaean date was found in the tomb, and the latest objects that came to light were two small fragments of red-figure ware. Lying among the late geometric sherds was the fragment of a painted pinax represented on Plate III. The fragment comprises about one-third of the plate, which must have been originally some fourteen inches in diameter. The decoration is strikingly different from that of the Geometric fragments, a figure-scene occupying both the interior and exterior surfaces of the plate.

The interior scene represents a boy on horseback, though only the front half of horse and boy is preserved on the fragment. Both

figures are drawn in outline filled in with a brown flesh-colour laid upon the reddish buff slip, which gives a dull red tone. The horse is stiffly drawn and no inner markings are visible in the present condition of the plate. The boy sits his horse with thigh almost vertical and the knee sharply bent back. He holds the reins in both hands, the left arm hanging by his side and bent at the elbow, the right arm bent at the elbow but lifted up above his head. On either side of his neck a long lock of braided hair falls on his breast. The body is clumsily drawn, the line of the chest running straight down without attempt to represent the abdomen. The horse's feet rest upon a black line which separates off the lower part of the field into an exergue of which only one corner still remains. The whole is enclosed in a heavy band of black.

Upon the exterior surface of the plate is depicted a male human figure wrestling with a sea-monster. The monster apparently lifts its body vertically in the centre of the plate, its tail bending away to the right. This tail is the only part of which it is possible to get a clear notion. It is painted in black silhouette, the scales or coils being represented by incised lines with white pigment to express the higher lights on the coils. The curious white band and triangular patch on the upper part of the monster probably represent the gills and small fin below, the head being just outside the surviving portion of the vase. The human figure wrestling with it is drawn in outline except for the black mass of his hair and beard. His arms encircle the upper part of the monster. His left knee is bent and perhaps is meant to be pressing against his opponent's back. His right leg is thrust forward and must have been planted so as to give purchase in throwing back the whole weight of his head and body as he drags down his foe. Unfortunately the fragment is broken just at the top of the man's neck and his head is lost. Enough remains to shew that he had a sharp pointed beard and heavy club of hair falling down his back. He is nude except for sword-strap, sandals, and waist-belt. A sheathed sword hangs under the left arm supported by a strap which presumably passed over the right shoulder though it is lost in the drawing. One end of the strap hangs loose from the sheath. The sheath itself is apparently of leather with an ornamented metal tip, painted, as is also the sword-handle, with white pigment over the buff slip, which gives a pale yellow colour. The human figure and the background are in the same dull red colour as the figures on the reverse.

Of the two scenes it is clear that the second was meant to be most seen and to mark the obverse side of the plate, that is, the side that would be seen if the plate were suspended against the wall of a room. The whole quality of the drawing on this side is different from that of the reverse. Here the artist boldly places one arm immediately behind the other, makes effective use of his black masses and keeps his line true and significant though with a tendency to over-emphasis and mannerism. On the reverse the potter has taken a stock motive out of his pattern-book and has executed it with little care. He has refused to face the real problem of drawing the right arm in proper perspective, and instead of attempting it merely employs an ugly conventional rendering. His line is poor and weakly drawn, and his figures both of man and horse are far from their real form.

The plate stands unique amid the surroundings in which it was found. It can hardly be of Cretan fabric. So far as the evidence goes the potter's art in Crete never underwent any real revival after the downfall of the Mycenaean power, and the later Mycenaean ware of the island gradually degenerates into stiffer geometric forms, so giving rise to a local branch of the general Geometric Style that prevailed throughout the Aegean in the eighth century. Very little foreign influence makes itself felt in the pottery of the island until the incoming of the black-figured and red-figured vases from Attica. The local geometric style has peculiarities of its own both in its forms of ornament and its vase-shapes, many of them closely analogous either to Cypriot or to the 'schwarz-geometrisch' ware of Rhodes, but the style never developed to anything approaching the splendid quality and individuality of Attic Dipylon ware, although the jug found by Miss Boyd at Kavousi[1] shews that it had worked its way up to the representation of men and women. There is no evidence for the existence of any Cretan 'Orientalizing' style following the Geometric.

It is certain too that the plate cannot belong to the Mycenaean period in spite of some puzzling reminiscences of Mycenaean art, as in particular the characteristic heavy waist-belt.[2] Both by its style and technical qualities it calls to mind the great Melian amphorae and the vases of the same fabric found in Rheneia.[3] The clay is crisp and red with a fine reddish buff slip. The human figures are drawn in outline,

[1] *A.J.A.* 1901, Plates III. and IV.
[2] Cf. *B.C.H.* 1897, pp. 169–183.
[3] *J.H.S.* vol. xxii. p. 47 *sq.*

that of the horseman being filled in with flesh colour. The sea-monster is represented in black silhouette with incised markings, a process which is often employed on the Rheneia vases side by side with outline drawing. In the actual quality of draughtsmanship the plate is equally close to the 'Melian' class, and there are many even of the same mannerisms, as for instance in the hands, profile and knee of the riding figure; moreover the shape of the plate is quite different from that of the Rhodian plates but has close analogy in those found in Rheneia, which have a vertical rim set at right angles to the body, no base-rim and the more important decoration on the exterior surface. The decoration of these Rheneia plates consists for the most part of plain black concentric circles on the interior, with the more elaborate forms of 'Melian' ornament, rosettes, spirals, etc., on the outer surface of the plate, while in place of the suspension holes of Rhodian plates they have a curved ribbon handle of the type often found on open bowls of Dipylon or Vourva fabric. According to Mr. Bosanquet's account plate-fragments of just this type were found among the débris of the Praesos tomb.

Of the two scenes represented on the plate that of the horseman is already familiar on the Melian amphorae, and it occurs under the same type on one of the Rheneia vases. The more elaborate scene represented on the exterior of the plate is clearly based on the type of the ἅλιος γέρων, one of the oldest pictorial types of Hellenic art. It is best known on the black-figure vases of Athens, where the monster has the name of Triton, but fully developed examples of the type occur as early as the seventh and the first half of the sixth century.[1] On the well-known 'Island Gem' (*Brit. Mus. Cat.* No. 82) the scheme is adapted to a circular field and is remarkably close to that of the Praesos plate. Herakles there appears with beard and long hair, carries his quiver on his back, and wears what is perhaps a short leathern jacket,[2] but might equally well be a heavy metal waist-belt of the Mycenaean type. If the latter, it would be a striking coincidence with the belt worn by the figure on the plate. Herakles clasps

[1] For a list *vide* Roscher, *Lexicon*, p. 2193 The Assos frieze and the Poros pediment both shew the type as modified by the limitations of an architectural setting. The bronze relief from Olympia more closely resembles the plate in the arrangement of the figures, though Herakles there carries a quiver and the monster is represented with human head turned back towards Herakles. Its great importance lies in the inscription which gives a definite name to the type and shews that it belongs to Peloponnesian as well as Ionian art.

[2] So the B.M. Catalogue, with a query.

his left arm around the monster's neck and with his right hand holds its left wrist. In front of the monster is a large fish occupying the vacant field, whilst another occupies the field below the two figures. It is not improbable therefore that on the plate also a large fish to the left of the monster balanced the human figure to the right, and the curious white object below the figures, which looks like a human foot, may be a portion of another fish.[1] A very similar 'Island Gem' (Furtwängler, Pl. V. No. 32) shews the motive of the ἅλιος γέρων without Herakles, the figure being simply represented with arms outstretched as though swimming. This latter gem was found in a grave in Melos, and its close resemblance to the former makes it necessary to assign both to the same provenance.

The connexion of the Praesos plate with the Rheneia vases and the Melian amphorae seems to be clear, although it is only in general character that the plate corresponds with the other vases, and in detail it shews distinct characteristics of its own, especially in the more carefully executed representation of the obverse. The curious 'Mycenaean' air of the Herakles figure is not merely the accidental result of the heavy waist-belt, but is produced also by the formalism in drawing which seems an essential factor of the painter's style. So too the definiteness and severe economy of the representation, combined with the clean field and the exergue, suggest that the artist is working under a 'Dorian' influence which is foreign to the other vases. Such characteristics are no doubt due in part to the individuality of the painter, but the whole representation is impressed with a style that makes one look to the Peloponnese for an explanation. The same influence is evidently at work in the sphere of Argive-Corinthian art, and among Proto-Corinthian vases of this period the vase found in Aegina with a representation of Odysseus (?) under the Ram[2] is very closely related to our plate. The 'Euphorbos' plate too, which is largely affected by the 'Melian' fabric, shews also a curious connexion with Argos in the letters of the inscription. On the other hand the source of the influence affecting the Praesos plate might equally well be found in the Cyclades themselves. The special characteristics of the plate—those

[1] That this object cannot really be the foot of a female figure, as is suggested by its shape and colour, seems to be certain from its scale and lack of detail. Hardly less impossible is the supposition that it can represent a landscape setting for the scene, unless, with some reminiscence of Mycenaean marine paintings, it indicates a rock.

[2] *Athen. Mitt.* 1897, Pl. VIII.

which distinguish it from the rest of its class—are just those suggestions of Mycenaean and Dorian influence which, from the history of the island, one might expect to find in Melos; and if, as I have argued elsewhere (*J.H.S.* xxii. p. 58), the so-called *Melian Amphorae* be wrongly named and be in reality, like the Rheneia vases, a Delian product, one could readily accept the Praesos plate as representing the sister fabric of Melos. In the absence of positive evidence a definite attribution of the vase would be out of place. Without it the plate is still of the greatest intrinsic interest in itself and an important addition to the evidence already available for the pottery of the Aegean islands at the beginning of the sixth century.

J. H. HOPKINSON.

THE KEFTIU-FRESCO IN THE TOMB OF SENMUT.

THE subjoined photograph, Fig. 1, very kindly taken for me by Mr. E. R. Ayrton, is, as far as I am aware, the first published of the important

FIG. 1.—KEFTIU-FRESCO IN THE TOMB OF SENMUT.

fresco of *Keftiu* (Minoan Cretans?) in the tomb of the architect Senmut at Egyptian Thebes. The three left-hand vases from this fresco were

reproduced in colour (not altogether correctly) by Prisse D'Avennes in his monumental work on the History of Ancient Egyptian Art (*Art Industriel: Vases des Tributaires de Kafa*, 9, 2), and tracings of his drawings were published by Prof. Steindorff, *Arch. Anz.* 1892, by Mr. W. M. Müller in his *Asien und Europa*, p. 349, and by me in my *Oldest Civilization of Greece*, pp. 53, 54. Other tracings of Prisse d'Avennes' reproductions have also appeared. In my article on *Keftiu and the Peoples of the Sea* in the eighth volume of the *Annual of the British School at Athens*, pp. 172, 173, Figs. 4–8, I published drawings of four of the vases shewn in this photograph and a fragment of a fifth (which does not appear in it), from sketches made by me at Thebes three years ago. These drawings indicated the colouring of the fresco accurately: in Prisse d'Avennes' the metal bands on the smaller 'Vaphio' vase were wrongly given, and there were other minor inaccuracies.

Mr. Ayrton's photograph gives a general idea of the appearance of the fresco. Four Keftians are represented walking in procession, carrying Mycenaean vases of Cretan type. Of these vases I have fully described four in *Keftiu and the Peoples of the Sea*. Two of silver, inlaid with copper and gold, are of 'Vaphio' shape; one is a great four-handled jar of copper; the last on the extreme right (first published *Keftiu*, Fig. 7), is of chased silver and gold. The raised ring at junction of neck and body of this vase is quite a Cretan trait (*B.S.A.*, viii. p. 173). In form the whole vase is almost a double of the fine bronze ewer found at Knossos in 1903 and published by Dr. A. J. Evans, *B.S.A.*, ix. p. 122, Figs. 76, 77. The shoulder-ring and handle are the same in both vases: only the repoussé ornamentation is different. Dr. Evans has already noticed the resemblance (*B.S.A.*, ix. p. 128, note 2), from the illustration in *Keftiu and the Peoples of the Sea*: the photograph shews much better than a drawing made from an imperfect sketch how exactly alike the two vases are. Dr. Evans is of opinion that the Knossos ewer dates to the Later Palace period, which thus appears to belong to the sixteenth century B.C., when Hatshepsut reigned.

It will be noticed that an attempt has at some time been made to cut this vase out of the wall, for sale to a possible purchaser: it is impossible to prevent vandalism of this kind in a tomb which is open and unprotected. The attempt was evidently given up when it was found that the stucco broke away under the chisel, but to it we owe the destruction of the lower

part of the picture: the foot of the vase may however be restored from the Knossos ewer.

The copper jug carried at arm's-length by the last man is not so distinctively Mycenaean in appearance as the others, though it rather resembles the vase from the tomb of Rekhmara: Prisse D'Avennes, *Vases de Kafa*, 4; *Asien u. Europa*, p. 349; *Oldest Civilization*, Fig. 47.

Unluckily the face of the Keftian No. 3 (from the left) is the only one at all well preserved. In any case the faces in this fresco were not so carefully drawn as those of the first three Keftians in the tomb of Rekhmara. The dress of Senmut Nos. 3 and 4 is interesting, the waistcloth of the last man being elaborately arranged. The ornamentation is well detailed in the fresco, and Mr. Anderson has made an enlarged drawing of it (Fig. 2), which shews it well. The kilt has a broad border of rosettes and, apparently, a band of the same design passing between the legs. This band would turn the kilt into something resembling a pair of boating 'shorts,' which is the impression one gets from the Kampos statuette and the Petsofá figures.[1] Senmut No. 4 possibly has an ivory-hilted dagger hanging from his belt, but the indication is doubtful: the trace is reproduced in Mr. Anderson's drawing, below the belt, and outside the upper thigh of the further (foremost) leg. If it is a dagger at all, it seems to be inserted in some way into the waistcloth, but the method of its attachment is not evident.[2] The peculiar projection of the rosette-border above this is

FIG. 2.—DETAIL OF DRESS OF KEFTIAN IN ABOVE FRESCO.

[1] J. L. Myres, *B.S.A.* ix. p. 361 ff. Pls. IX. X. According to Mr. Myres' conception of the garment, the band would be part of the loincloth, while the other similar rosette-borders would be the edges of the kilt, a garment distinct from the loincloth.

[2] It is perhaps possible also to discern the ivory handle of a dagger, apparently stuck into the kilt, in Champollion's drawing of a Rekhmara Keftian, reproduced *Asien u. Europa*, p. 340, *Oldest Civilization*, Frontispiece. The vase and boots in this drawing are incorrect (more correctly in the sketch published by Steindorff, *Arch. Anz.* 1892, p. 13; second figure from right), but the details of the kilt appear to be reliable. If these are really indications of dagger-handles in both cases, we are probably to understand a dagger or knife depending from the belt, as in the Petsofá figures. The hilt of the Rekhmara dagger (?) would seem to have been rounded, that of the Senmut dagger (?) to have been like the sword-hilt Tsountas-Manatt, Fig. 87.

paralleled in the dress of the Rekhmara Keftian, *B.S.A.* viii. p. 171, Fig. 2. In that figure I had taken it to be the sheath of the dagger which the man is holding, but the Senmut representation does not confirm this supposition, and it would seem to be in both cases part of the kilt.

It is curious to note in this picture by an Egyptian artist the careful delineation of the small Mycenaean waist: native Egyptians are never represented with such small waists, and it seems probable that the 'Mycenaean waist' was not a mere artistic convention, but a characteristic of the race.

The hieroglyphs above have nothing to do with the subject below them, but refer to adoration of the Sun-god by the deceased Senmut.

I understand that a new reproduction in colour of the fresco was made some years back by Mr. Howard Carter, with the intention of its being published by Messrs. Steindorff and Newberry. It is to be hoped that it will soon appear.

I may add that the four-handled copper vase of this fresco has been paralleled by a colossal vase of white marble (not alabaster) found by M. Georges Legrain last year at Karnak, and now in the Cairo Museum. It is inscribed with an Egyptian dedication to the god Amen by the Queen Hatshepsut (for whom Senmut built the temple of Deir el-Bahari); it seems to me, however, to be very probably not a native Egyptian work but a Minoan vase imported from Crete and dedicated to the god of Thebes as a remarkable work of art. It resembles in design the copper vase of Senmut's fresco and is an interesting example of the imitation of metal-work in stone. I understand that it will shortly be published by M. Legrain.

H. R. HALL.

SOUTH-WESTERN LACONIA.

SITES.

I PROPOSE in this paper to give some account of the topography and existing remains of the district lying between the range of Taygetus and the eastern coast of the Messenian Gulf. The ground covered extends from Pyrgos on the south, some eight kilometres south of Areopolis, to Kalamata.

Geographical Characteristics.

The sea border of the eastern shore of the Messenian Gulf consists of a narrow shelf of land lying along the foot of Taygetus, which here approaches everywhere nearer to the sea than on the side of the Laconian Gulf. It is everywhere mountainous, and in many places the outlying spurs of Taygetus run abruptly into the sea. Harbours are not infrequent, those of Limeni and Kardamyle being the safest and most commodious. The rivers are mere mountain torrents; water is scarce; the land is everywhere infertile, except here and there, where either a small stretch of plain borders the shore, as at Levctro, or a high plateau overlooks the sea, as at Koutiphari and Platsa; the rich valley of Kampos in the north is the only instance of an inland plain.

Literary Evidence.

Under such geographical circumstances it can hardly be expected that the district can ever have possessed much historical significance. We possess, however, a certain amount of literary evidence, which shews that

though far from the centre of the Greek world, it possessed a number of flourishing communities of which evidence still exists in the shape of inscriptions and remains of ancient structures.

Homer mentions several early sites in this district, 'Kardamyle, Enope and grassy Ira' (*Il.* ix. 150) and Oetylus in the 'Catalogue of the Ships' (*Il.* ii. 585). The principal remains of early civilisation are the 'beehive' tomb near Kampos and the splendid remains of polygonal masonry at Jannitsa.

The frontier of Laconia and Messenia was a matter of dispute in classical times and was subject to variation.[1] The disputed territory was that which lies between the 'Glen of the Choerus,' now the Sandava, on the north, and the river Pamisus, now the Milia, on the south. In the fourth century, it seems to have belonged to Laconia, since Philip of Macedon, after Chaeronea, bestowed it upon the Messenians as a punishment to his foes, the Lacedaemonians; Augustus restored it to Laconia to punish the Messenians for having sided with Marcus Antonius, and the glen of the Choerus remained henceforward the line of division. Since this is so, and since Pausanias included all the district south of this point in his *Laconica*, it is convenient to take the glen of the Choerus as the north boundary of Ancient Laconia.

TOPOGRAPHY.

The district is, as I have said, a narrow shelf of land along the sea coast and a single main route forms the connection between north and south; the best method of description is therefore to treat of the ancient sites and existing remains in the order in which I myself visited them.

Travelling from Gytheion I approached the Messenian Gulf by the low pass leading through Taygetus from Skutari to Areopolis. The furthest point reached to the south was the village of Charouda, where I hoped to copy the inscriptions in the church of Παναγία ἁγία Καβαθάκια, partly transcribed by Le Bas (Le Bas-Foucart, 2786: Collitz-Bechtel, 4505): unfortunately they have been removed and used for building the new tower of the Church of Hagios Taxiarchos. Neither here nor at Pyrgos, whence I publish two inscriptions (Nos. 1 and 2), are any traces of ancient settlements to be found.

[1] See Frazer's note on Paus. iv. 1. 1.

PYRRHICHOS.

These inscriptions were probably brought from Kavalos, which lies some five kilometres inland from Areopolis about midway between the Messenian and Laconian Gulfs, and has been identified with the ancient Pyrrhichos.[1] This no doubt is a correct identification, and I add a few facts which further confirm it. Numerous ancient remains are to be found here, including two statues, one a torso of a Roman female portrait statue, and a small gliding figure, apparently a Niké, and numerous columns and capitals. North of the village, on a terrace on the hill-side, have been recently found a number of columns of two sizes, which probably mark a temple site. Again, the plain east of the village is still known by the name of Pyrkos. Inscriptions have been found in the neighbourhood, including one published below (No. 3). The well of Silenus mentioned by Pausanias is probably one of the two large wells in the village; he says of this well that 'the inhabitants would be in want of water if it failed'; the inhabitants of the village of Kavalos say that they have to depend entirely on their two wells in the summer. On a hill, about half an hour to the south-east, is a cave with the entrance partly built up, now called στὸ παλάτι, and lower down is an artificial cave fifteen metres deep. On the top of the hill is the medieval fortress of Kastraki.

OETYLUS.

North of Areopolis lies the bay of Limeni, in the north-east corner of which is the village of Oetylus, or Vitylo, on a steep hill overlooking the sea. South of this hill and between Oetylus and the hill of Kelepha, which is surmounted by a Venetian castle,[2] is a deep ravine through which, in winter time, a broad stream flows to the sea. Not far to the left of the mouth are the remains, apparently, of a Hellenic building *in antis* with numerous large blocks still *in situ* and others built into walls near. The ancient town was probably one of the oldest and most important in the district.[3] The modern village is approached by a steep winding path; half-way up lies the ruined Church of Hagios Demetrios

[1] Paus. iii. 25. 1. First identified by Boblaye (*Recherches*, p. 88).
[2] See Coronelli, *Descr. de la Morée* (Paris, 1687), p. 37, with a plan of the fortress.
[3] Paus. iii. 25. 10. Strabo viii. 360. Ptol. iii. 14. 4. 3. Tozer, *J.H.S.* 1882, p. 355.

in which inscriptions have been found (Nos. 4 and 10). Immediately below it is the corner of a wall of Hellenic masonry, 10 courses high, of blocks measuring about 1 m. by 1·5 m. The Church of Hagios Soter contains numerous ancient blocks and some columns. Numerous inscriptions are built into the Churches of the Κοίμησις τοῦ Θεοτόκου and Hagios Taxiarchos (see below, Nos. 5, 6, 9, 11, 12). Below the village to the south, the half-ruined Church of Niarmitsa seems to consist largely of Hellenic masonry of large *poros*-blocks still *in situ*. There are traces of an ancient cart road leading north from the village, and higher up numerous rock-cuttings indicating an ancient quarry.

THALAMAE AND THE ORACLE OF INO-PASIPHAE.

The next ancient site to the north of Oetylus was Thalamae, the site of which has never been ascertained, though the literary evidence about it is considerable.[1] It was about 80 stades from Oetylus and 20 stades from Pephnos (Paus. iii. 26, 1–2); it was not immediately on the sea coast (Ptol. iii. 16, 22); in the near neighbourhood was a famous sanctuary of Ino-Pasiphae (Paus. *loc. cit.*; Plutarch, *Agis* 9; *Cleomenes*, 7; Cic. *de Div.* i. 43, 96), where worshippers slept and received oracles in dreams. This oracle was, according to Pausanias, on the road from Oetylus; according to Cicero, 'in the fields near the town':[2] it was therefore near the town to the south. A spring of fresh water flowed from the sanctuary.

At the village of Koutiphari are two inscriptions, mentioning the people of Thalamae (Nos. 19, 20), the latter on a block of such a size that it could hardly have been brought from another site. To the east of the village, on higher ground at a place called Palaiochora, numerous ancient remains, columns and walls, have come to light, including an inscribed *pithos* (No. 16); and other inscriptions are built into churches and houses (Nos. 14, 15, 17, 18, 20). The distance from Oetylus, which is 19 kilometres, agrees with the 80 stades given by Pausanias, and the site is not immediately on the sea coast, but some 3 kilometres

[1] Leake placed it at Platsa (*Pelop.* p. 178 f.); Boblaye (*Recherches*, p. 92 f.); Bursian (*Geog.* ii. p. 153) and Curtius (*Pelop.* ii. p. 284) in the valley of the Milia.

[2] The whole passage runs, 'atque etiam qui praeerant Lacedaemoniis, non contenti invigilantibus curis in Pasiphae fano, quod est in agro propter urbem, somniandi causa incubabant' (Cic. *loc. cit.*).

inland. I have therefore no hesitation in fixing Thalamae at the modern Koutiphari.

Near to Palaiochora and south of the main part of Koutiphari is a large open space in which are two copious springs arched over with vaulting. With the exception of the village of Langada, where are no traces of antiquities or inscriptions, there is no natural spring on the whole road from Oetylus, and all the villages have to depend on cisterns for their water supply. It is the larger and more southerly of these springs which, I think, marks the site of the Oracle of Ino-Pasiphae; and in further confirmation of this view, I found built into the window-sill of the neighbouring schoolhouse an inscription recording a dedication to Pasiphae (No. 15).

The River Pamisos, Pephnos and Leuctra.

Leaving Koutiphari, the road passes Platsa and descends into the valley of the Milia, the ancient Pamisos (Strabo, viii. 362). Off the mouth of it lies the rocky island of Pephnos,[1] upon which were once statues of the Dioscuri, which agrees exactly with Pausanias' description, 'not much larger than a great rock.' The town of the same name on the mainland was probably the port of Thalamae: the distance of 4 kilometres from Koutiphari to the mouth of the Milia agrees exactly with the 20 stades between Thalamae and Pephnos given by Pausanias; Levctro, the ancient Leuctra (Paus. iii. 26, 4), lies 4 kilometres to the north. The ancient Acropolis hill rises out of a plain and is surmounted by the ruins of a Venetian castle where in antiquity stood a shrine of Athena. Below this to the south are some remains of ancient masonry, including a long stretch of Roman wall; to the north are said to be the remains of a subterranean channel for water. At Levctro, I found two inscriptions (Nos. 21, 22), the latter of which confirms Pausanias' statement as to the worship of Asclepius at Leuctra. I was informed that on the banks of a small stream north of Levctro the natives dig up charcoal; this must, I think, mark the position of the Grove of Eros mentioned by Pausanias, which was burnt down in his time.

[1] Paus. iii. 26. 2. First identified by Mr. Morritt of Rokeby (the friend of Sir Walter Scott), see Walpole's *Memoirs relating to Turkey*, i. p. 51.

KARDAMYLE.

After Leuctra, the road again becomes exceedingly hilly and rugged and no villages occur until, after seven kilometres, Kardamyle is reached. A modern town has recently grown up round the excellent little harbour; the older village is now almost deserted and occupies the site of the ancient city on a hill overlooking the sea, rather less than two kilometres distant, eight stades according to Pausanias (iii. 26, 5): it agrees well with the words of Strabo (viii. 360), who says that it was situated 'on a steep rock.' The only remains of antiquity now to be seen there are numerous rock cuttings and an Ionic capital outside the Church of Hagia Sophia.

In the lower town south of the mouth of a stream, foundations are said to exist under the soil, and terracottas have been found; perhaps they mark the site of 'the sacred enclosure of the daughters of Nereus, near the shore' (Paus. *loc. cit.*). Near this stream I found the tomb inscription (No. 23). Built into a house in the main street is a white marble herm, 1·3 m. in height, representing a bearded figure, with locks falling over the shoulders: it is in excellent preservation and seems to belong to the fourth century B.C. Between the upper and lower towns a rock-cut tomb of two chambers has recently been discovered: the natives call it 'the tomb of the Dioscuri.'

GERENIA AND ALAGONIA.

North of Kardamyle, a large spur of Taygetus, now called Kephali, runs down into the sea at the promontory of Kourtissa, reaching a height of 550 metres. It is undoubtedly the mountain of Kalathion (Paus. iii. 26, 11), for it is the only at all striking eminence in this neighbourhood. It lay in the territory of Gerenia as to the position of which there has been some controversy. The only indication that Pausanias gives is that Alagonia lay thirty stades inland from Gerenia. This clearly implies that the latter was on the sea coast. Both must lie within a district bounded by Taygetus, the mountain Kalathion, the sea and the 'Glen of the Choerus'—the modern Sandava. Leake placed Gerenia at Kitries, and I think rightly, since Pausanias implies that it lay on the sea coast and this is the only harbour between Cape Kourtissa and the Sandava. Near the shore, to the north of Kitries, some columns and a plain tesselated pavement have been

found ; but it is probable that here, as in so many places in Greece, the sea has encroached on the ancient site.

At Gerenia was a famous shrine of Machaon, and it is interesting to find it mentioned as one of the places where a copy of the inscription published below (No. 21), found at Leuctra, was to be set up.

If Gerenia is placed at Kitries it is easy to assign a site to Alagonia, which lay '30 stades inland from Gerenia' (Paus. *loc. cit.*). At Kampos, besides the well-known 'beehive' tomb, are considerable remains of antiquity ; inscriptions and very numerous coins have been found here, there are columns and ancient blocks built into the houses, and ancient foundations have been dug up in the fields west of the village. Moreover, the distance of six and a quarter kilometres from Kitries to Kampos agrees well with the thirty stades from Gerenia to Alagonia given by Pausanias.

Alagonia should therefore, I think, be placed at Kampos. The French surveyors and Prof. Curtius place Gerenia at Zarnata, just to the west of Kampos, and Alagonia near the head of the valley of the Choerus (Sandava).[1] As regards the first, there are no ancient remains at Zarnata, which is a Venetian fortress, and Pausanias implies that Gerenia was on the sea coast : as regards the second, the upper course of the Choerus flows through a narrow gorge which would hardly leave room for a town and contains no modern village. I could hear of no ancient remains in this district, and if Alagonia had lain on the Choerus, Pausanias would probably have mentioned this river in connection with it, rather than when speaking of the Messenian town of Abia (iv. 30. 1).

THE MESSENIAN FRONTIER. ABIA. REMAINS AT JANNITSA.

The 'Glen of the Choerus,' the boundary of Laconia and Messenia, is the bed of the modern Sandava which enters the sea some two kilometres north of Kitries. It is the only at all considerable stream between Cape Kourtissa and Kalamata, and as in its upper course it runs through a deep ravine, it forms a natural territorial boundary.

The distance of nearly four kilometres from the Sandava to Palaiochora, which has been identified with certainty as the ancient Abia (Paus. iv. 30. 1), agrees well with the distance given by Pausanias from the

[1] Boblaye, *Recherches*, p. 93 ff. ; Curtius, *Pelop.* ii. p. 284.

'Glen of the Choerus' to Abia. The remains of antiquity at Palaiochora are inconsiderable. A small valley runs down to the sea in which are some traces of Roman masonry, and there are some late tombs near a wall running south at right angles to it. The Church of the Panagia, in which Leake and others saw a mosaic and an inscription on the Hagia Trapeza, has been restored and both have disappeared. I copied an inscription (No. 24) built into a neighbouring house.

Four kilometres north of Palaiochora are the salt springs mentioned by Pausanias (iv. 30. 2) at the place now called Halmyro.

There appears to have been no ancient site, and no ancient remains now exist between Palaiochora and Kalamata. At Jannitsa, however, north-east of the angle of the gulf, some six kilometres east of Kalamata, are some most striking 'Mycenaean' remains of early polygonal masonry, which crown the summit of the hill round which the modern village is built.[1] The position is exactly such as would be chosen for a 'Mycenaean' fortress, since it occupies a commanding eminence at no great distance from the sea and controls an ancient carriage route over Taygetus, considerable traces of which are to be seen further to the east. Mr. R. Weil would identify it with the ancient Kalamae, which, however, more probably lay in the Messenian plain,[2] while Mr. E. Pernice thinks that the ancient Pharae stood here and not, as is generally accepted, at Kalamata: but Pausanias (iv. 30. 1) gives the distance from Pharae to the sea as six stades and Strabo (viii. p. 361) as five; they agree closely and are not both likely to be wrong, and the distance of Jannitsa from the sea is at least four kilometres. The ancient fortress of Jannitsa must, however, have been an important early settlement, and two inscriptions found near and a number of coins of the fourth and third centuries B.C. discovered within its walls, shew that it was also occupied in classical times. Strabo in discussing (viii. 360) the position of the Homeric city of Ira proposes two sites for it, one at Oechalia, and the other at 'the place now called Mesola, between Taygetus and the Messenian Gulf.'[3] This description is particularly applicable to Jannitsa, since it lies on a

[1] E. Pernice in *Berl. phil. Wochenschrift*, 1893, p. 1373 f., and *Mittheil.* 1894, pp. 355-367; R. Weil, *Mittheil.* 1882, p. 216.

[2] See Mr. Frazer's note on Paus. iv. 31. 3.

[3] Pausanias (iv. 30) speaking of Abia says '*Ἴρην καλεῖσθαι πάλαι . . . φασίν*,' implying that he does not feel sure of the identification, and Palaiochora, which lies on a plain and near the seai shore, is hardly a likely site for a 'Mycenaean' fortress.

spur midway between the range of Taygetus and the north-east corner of the gulf, and was occupied in classical times.

I would therefore suggest that the Homeric Ira and classical Mesola was situated at Jannitsa.

There can be little doubt that the Homeric fortress of Pharae occupied the hill overlooking Kalamata, which is now covered by the ruins of the important Frankish fortress of Villehardouin.

EDWARD S. FORSTER.

SOUTH-WESTERN LACONIA.

INSCRIPTIONS.

I.

Inscriptions from the East Coast of the Messenian Gulf.

1. Pyrgos: ruined Church of Ἅγ. Θεράπων, S.E. of village. Funeral stele of red marble, ·35 m. × ·27 m., with apex of pedimental form: letters ·02 m

ΓΟΡΓΙΠΙΣ	Γοργιπὶς
ΧΑΙΡΕ	χαῖρε.

For single π cp. Collitz-Bechtel, 4583, 4585*a*, and Wünsch, *Defixionum Tabellae*, 36 *et saepe* (Κύδιπος, Λεύκιπος, *etc.*).

2. Do.: Church of Ἅγ. Γεώργιος, N.W. of village. Funeral stele of red marble, ·38 m. × ·27 m., letters ·017 m.: built in above door and with cross cut on it.

ΚΛΕΠΑΤΡΑ	Κλεπάτρα
ΧΑΙΡΕ	χαῖρε.

Κλεπάτρα for Κλεοπάτρα, cp. Θέγειτος (= Θεόγειτος = Θεογείτων), *Ath. Mitt.* i. 234, No. 7: Θεδωρίς (= Θεοδωρίς), Paris, *Elatée*, 282, No. 2: Θέτιμος, Θέδωρος *I.G.* vii. *saepe*: see Meister, *Griech. Dialekte*, i. 248.

3. Kavalos (Pyrrhichus): ruined Church of the Καλόγεροι, 20 minutes E. of the village. Funeral stele of bluish marble, ·53 m. × ·30 m.: letters ·03 m.

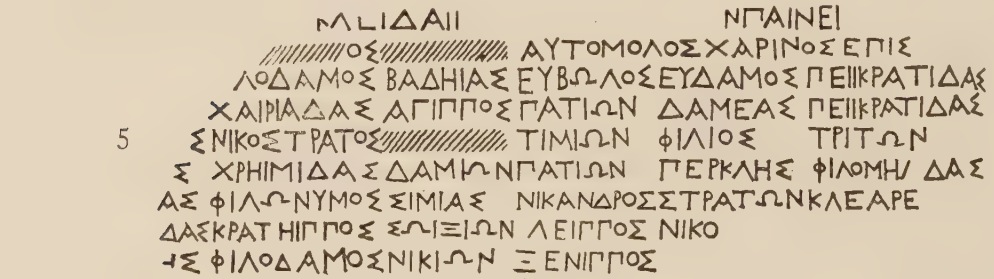
ΕΥΒΗCΥΧΟC	Εὐβήσυχος
ΧΑΙΡΕ	χαῖρε.

4. Areopolis, in the house of the Demarch, brought from the ruined Church of Ἅγ. Δημήτριος at Oetylus. Stele of bluish marble, max. length ·7 m., max. breadth ·29, thickness ·12: letters l. 1 ·04–·05 m., l. 2 ·06–·08 m. The surface is much damaged and rapidly disintegrating. The moulding at the top seems to show that the inscr. was in a vertical position: and a round hole at the top implies that something was inserted there. The inscription is retrograde.

[K](λ)ε(ό)μαχ(ο)[ς]
Καροκλένα.

Καροκλένα, *i.e.* Καροκλείνα.

5. Oetylus: outside Church of Κοίμησις τῆς Θεοτόκου. Block of white marble, ·44 m. × ·17 m., the right hand edge and probably the top are preserved: letters ·01 m.



	(Κ)λ(ε)ίδα(μ)[ος]			- - - - ν	Παΐνει[κος]
	. . . . . ος		Αὐτόμολος	Χαρῖνος	Ἐπισ - - - - -
	[Φι]λόδαμος	Βαδηΐας	Εὔβωλος	Εὔδαμος	Πειϊκρατίδας
	Χαιριάδας	Ἄγιππος	Πάτ(ρ)ων	Δαμέας	Πειϊκρατίδας
5	- - - - - ς Νικόστρατος		Τιμίων	Φίλιος	Τρίτων
	- - - - - ς Χρηϊμίδας	Δαμίων	Πάτ(ρ)ων	Περκλῆς	Φιλομη(λ)[ϊ]δας
	- - - ας Φιλώνυμος	Σιμίας	Νίκανδρος	Στράτων	Κλεάρε[τος]
	- - δας Κρατήϊππος	Σωιξίων	[Κ]λείππος	Νικο - - - -	
	- - - (η)ς Φιλόδαμος	Νικίων	Ξένιππος		
10	Λυϊγένης	Τιμύλος	Φιλέ(α)ς		

A catalogue of names, possibly of Ephebes.

L. 1. Παΐνεικος. The medial σ is often replaced in early Laconian inscriptions by h, *e.g.* Πειηιπ(π)ίς (=Πεισιππίς, Collitz-Bechtel 4559), Λύηιππος (=Λύσιππος, *ibid.* 4591), νικάάς and ἐνίκαε̃ (=νικάσας, ἐνίκασε, *ibid.* 4416). In the present inscr. the *spiritus asper* is no longer written, though it may still have influenced the pronunciation of the names Πειικρατίδας, Λυίγένης, *etc.*; cp. Σωΐνικος (Collitz-Bechtel 4445, 4446, *etc.*). Πειίκλείδας (*C.I.G.* 1458), which Boeckh emended to Πε[ρ]ικλείδας, is probably for Πεισικλείδας.

L. 2. The names in the second and third columns seem to have been erased purposely, also that in the third column of l. 5.

Αὐτόμολος seems not to occur elsewhere.

L. 3. Βαδηΐας cannot, as far as I know, be paralleled: it may be connected with the root Fαδ-, from which comes ἡδύς, F being often represented by β in Laconian inscriptions, *e.g.* Εὐβάλκης, Βιόλας, Βοινέας, Εὐβάνωρ.

L. 6. Περκλῆς for Περικλῆς, cp. Collitz-Bechtel 4533, Περκλεί[δας], and *ibid.* 4440 l. 22, Περφίλα.

L. 8. Σωιξίων, the reading is certain, but I can give no parallels.

[Κ]λείππος found in *I.G.* ii. No. 551, l. 55: Κλείππη and Κλειππίδης also occur.

L. 10. Τιμύλος, apparently a *Kosename* for such a name as Τιμοσθένης or Τιμόμαχος, cp. Δημύλος for Δημοσθένης, Θράσυλλος for Θρασύμαχος. Τίμυλλος occurs at Thespiae (*I.G.* vii. 1737). On this class of name see Bechtel-Fick, *Griech. Personennamen*, p. 27.

6. Do.: in W. wall of Church of Ἅγ. Ταξιάρχης, on slab of white marble, ·76 m. × ·46 m., slightly fractured above: letters ·02 m.

```
    \TΣ                  [Ἁ πόλις](ά) τ(ῶ)[ν]
    ιΥΛΕΩΝ               [Βει](τ)υλέω(ν) [Ἀρ]-
    ΕΤΟΦΑΝΗΝι            [ι]στοφάνην [Πο]-
    ΛΥΚΡΑΤΟΥΣΚΑ          λυκράτους κα[ὶ]
5   ΦΙΛΩΝΥΜΙΑΣΕΠΙ    5   Φιλωνυμίας ἐπι-
    ΔΕΞΑΜΕΝΩΝ            δεξαμένων
    ΟΑΝΑΛΩΜΑΦ            [τ]ὸ ἀνάλωμα Φ[ι]-
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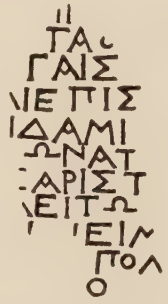
ΛΩΝΥΜΙΔΑΚΑΙΦ	λων(υ)μίδα καὶ Φ[ι]-
ΛΩΝΥΜΙΑΣΤΗΣ	λωνυμίας τῆς
ΙΗΤΡΟΣ	(μ)ητρός.

L. 2. The *ethnicon* of Oetylus is given as Οἰτύλιος by Steph. Byz., but Βειτυλεῖς is found, *C.I.G.* 1323.

L. 5. *ἐπιδεξαμένων*, instead of the more usual *προσδεξαμένων*: for *ἐπιδέχεσθαι* in this sense cp. Grenfell and Hunt, *Oxyrhynchus Papyri*, I. cii. 7 and ciii. 5.

7. Do.: Fragment of red marble brought to me in the village, ·15 m. × ·07 m.: letters ·01 m.



8. Do.: In house of the priest of the Church of Κοίμησις τῆς Θεοτόκου. Funeral stele of bluish marble, ·33 m. × ·21 m.: letters ·015 m.

ΦΙΛΟ ΚΡΑ	Φιλοκρα-
ΤΙΔΑ	τίδα
ΧΑΙΡ	χαῖρ[ε].

The first two lines are on either side of an urn, χαῖρ[ε] on the body of it. For this form of stele, cp. Le Bas-Waddington, *Mon. Fig.* Pl. 98, 1.

9. Do.: Fragment of cornice of funeral monument of red marble outside the Church of Κοίμησις τῆς Θεοτόκου, ·4 m. × ·19 m.: letters ·025 m.

ΟΥΚΕΧΑΙΡ	-ου ΚΕ χαῖρ[ε].

This seems more probable than a vocative ending in *-οῦκε*: for omission of *βιώσας* cf. M. N. Tod, *Sparta Cat.* No. 523 ,Ἀγάθων χαῖρε ΛΒ.

10. Do.: Fragment of funeral stele from ruins of Church of Ἅγ. Δημήτριος, of white marble, ·23 m. × ·19 m.: letters ·02 m.: above vase and comb (?).

ΜΙΑΧ/ - - - μία χ(α)[ῖρε].

11. Do.: Note on two funeral stelae built into Church of Κοίμησις τῆς Θεοτόκου, both representing female figures.

(*a*) Le Bas-Waddington, *Mon. Fig.* Pl. 97, 5 rightly reads :—

ΔΑΜΑΡΙΝ×ΧΑΙΡΕ

Petrides (*ap.* Le Bas-Foucart, No. 276, note) wrongly transcribes Ἀμαρίνα χαῖρε.

(*β*) Le Bas-Foucart, No. 276, quotes Petrides, who reads Ἀμαρίνα χαῖρε βιώσασα ἔτη Ζ. The stone shows :—

ΑΓΑΡΙΝ ΧΑΙΡΕ	Ἀγάριν χαῖρε
ΒΙΩ CAC	βιώσασ-
ΕΤ ΗΛΑ	[α] ἔτη ΛΑ.

Δαμάριν and Ἀγάριν are contracted for Δαμάριον and Ἀγάριον, cp. Τειμάρειν for Τειμάριον (Collitz-Bechtel, 4586, from Charouda): Jannaris, *Historical Gk. Grammar*, § 302: Thumb, *Griech. Sprache*, p. 154, *Byz. Zeitschr.* ix. (1900), 418 ff.

12. Do.: Church of Ἅγ. Ταξιάρχης. Small stele of greyish marble with pedimental apex, broken top and bottom, ·175 m. × ·19 m.: thickness ·07 m.: letters ·02 m. The second word is on a sunk panel in the centre.

ΔΑΜΑΡΙΟΝ	(Δ)αμάριον
ΧΑΙΡΕ	χαῖρε.

13. Note on Le Bas-Foucart, No. 274, who does not give exact *provenance*: this inscr. is cut on a large boulder in the Langada below and S. of Oetylus.

14. Koutiphari, found among the ruins of the old schoolhouse, a little N. of the spring: marble block, ·9 m. × ·3 m.: letters ·06 m.

Διὸς καβάτα

πέμποι

Fέτει

θύεν

[? ἰ]λήιον

Γᾶι ? ?

For forms of letters cp. Laconian Inscr. from Delos (Röhl, *I.G.A.* 91 : *B.C.H.* iii. 12 ff.), which can be dated between 403 and 398 B.C. This inscription, therefore, probably belongs to the late Vth cent. The surface is much damaged.

For the form of inscription cp. *I.G.* ii. 1665.

L. 1. Καβάτα, a Doric form for Καταιβάτου. Ζεὺς Καταιβάτης was worshipped in places struck by a thunderbolt, which were fenced in and an altar erected for sacrifice (Polemo. *fragm.* 93, *ed.* Preller). Such an altar existed at Olympia (Paus. v. 14, 10) : and two inscriptions relating to this cult have been found at Athens, one on the Acropolis, Διὸς Κα[τ]αιβάτο[υ] ἄβατον (Δελτ. Ἀρχ. 1890, p. 144) of the late IVth cent., and the other near the Olympieion, built into a wall, [Δ]ιὸς [Κ]αταιβάτου (Ἐφ. Ἀρχ. 1889. p. 61 f.), of the Early Roman epoch.

L. 2. πέμποι apparently for πέμπτῳ.

L. 5. This word possibly = [ἰ]λήσιον, a substantive formed from ἱλάσκομαι, through the by-form ἱλέομαι (Aesch. *Suppl.* 117, 128) : but it cannot be paralleled. Its meaning would seem to be 'a propitiatory offering.' For h = σ see below, No. 15.

L. 6. I can make nothing of the second half of this line : it is doubtful whether the fourth letter is Β or Β. The fifth letter seems to be Υ, but this is shown to be improbable by the undoubted V of l. 4. The last two letters seem to be ΛΟ.

15. Do.: Built into window-sill of schoolhouse, just S. of the spring: block of white marble, height ·3 m., breadth ·44 m., thickness ·08 (?).

ΝΙΚΟΣΘΕΝΙΔΑΣΤΑΙΠΑΗΙΦΑΙ
ΓΕΡΟΝΤΕΥΩΝΑΝΕΣΗΚΕ

Νικοσθενίδας ταῖ Παηιφᾶι
γεροντεύων ἀνέσηκε.

The position of the stone and the fact that it is heavily whitewashed make it difficult to read. The two opening lines seem to be followed by six lines with slightly smaller letters: in ll. 4 and 7, the name *Νικοσθενίδας* recurs. (See *addendum* on p. 188).

For the form of this inscr. cp. Le Bas-Foucart, 162 h.

L. 1. *Παηιφᾶι* contracted for *Παηιφάαι* (Plut. *Agis*, 9, *ἱερὸν δὲ Πασιφάας κτλ.*). For h=σ in Laconia, cp. *Ποηοιδᾶνι* (Collitz-Bechtel, 4592), *ἐποίηηε* (*op. cit.* 4419), *Αἰνηηίας* (*op. cit.* 4422).

L. 2. *ἀνέσηκε*, Doric for *ἀνέθηκε*, found also at Sparta (Collitz-Bechtel, 4500, 4504).

On the importance of this inscription as bearing on the cult and oracle of Ino-Pasiphae near Thalamae, see above p. 161.

16. Do.: Inscr. on *πίθος* found N. of the large fountain, 1·05 m. in diameter, 1·67 m. deep, ·58 m. across the mouth: letters ·025 m. cut outside of mouth.

ΕΡΟΕΓΕΩΡ FΙΕ

17. Do.: Note on Le Bas-Foucart, No. 284. This inscription on the fragment of a red marble stele, over the door of the Church of the *Εὐαγγελίστρα* (·10 m. by ·40 m.: letters ·015 m.), is condemned as modern by Le Bas. This is certainly not the case: stelae of this type and material are elsewhere used in Maina for re-erection over church doors (cp. above, Nos. 1 and 2) and recut with a Christian cross.

See Le Bas-Foucart, *loc. cit.*

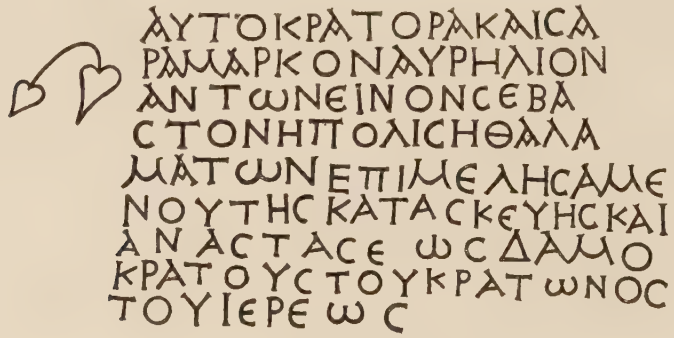
- - - - *θέα χαῖρε*
- - - - *θε(ο)[ς χαῖρε]*.

-θέα and *-θεος* seem to form the last two syllables of proper names. There are some very slight traces of lettering where the cross has been cut over. The base of the cross, which appears to have been double, has been cut off.

18. Do.: Note on Le Bas-Foucart, No. 282 (Collitz-Bechtel 4578; Petrides, *Pandora* xix. (1869), p. 435): outside Church of Ἅγ. Γεώργιος.

In l. 1 Le Bas read Ἀνταμένη, Petrides Ἀνιαμένη: in Collitz-Bechtel the latter is adopted on the ground that 'Ἀνταμένη ist kein Name': the third letter, however, is certainly T.

19. Do.: At large spring, brought with No. 18 from neighbouring ruins of Church of Ἅγ. Στράτηγος, a few yards N. of the old school-house where No. 14 lies. Massive marble block 1·37 m. long, ·73 m. high, ·73 m. deep. The block is complete; it is finished off on the left, but probably had a similar block adjoining on the right. The sockets show that it held two standing figures: under the right is inscr. given below (length of line ·43 m.: letters ·03 m.), under the left are traces of a second inscr., purposely erased (only a final N remains), of four or five lines (length of line ·68 m.).



Αὐτοκράτορα Καίσα-
ρα Μᾶρκον Αὐρήλιον
Ἀντωνεῖνον Σεβα-
στὸν ἡ πόλις ἡ Θαλα-
ματῶν, ἐπιμελησαμέ-
νου τῆς κατασκευῆς καὶ
ἀναστάσεως Δαμο-
κράτους τοῦ Κράτωνος
τοῦ ἱερέως.

This base must have held statues of Caracalla and Geta: for the title Αὐτοκ. Καῖσ. Μ. Αὐρήλ. Ἀντων. Σεβ. is applied to the former in *C.I.G.* 1075, 1185, 1216, add. 2140*x*³, 2581, add. 3882*e*: Latyschev, *Inscr. Pont. Eux.* ii. 34: *Sitzb. d. k. Bayer. Akad.* 1888, p. 317. The erased inscr. must have been in honour of Geta. The base was therefore set up during the joint reign of Caracalla and Geta, *i.e.* between Feb. 211 and the end of Feb. 212: and the erasure must have been made probably before the end of 212 A.D.

20. Note on Le Bas-Foucart 281 and 281 b. This stone is now built into a shop a few yards S. of the large spring. It contains three inscriptions:—

(*α*) Le Bas-Foucart 281. In l. 9 the reading should be ἔνκτησιν not ἔγκτησιν.

(*β*) Fragment of προξενία inscription.

(*γ*) Le Bas-Foucart 281 b (Wide, *Lakonische Kulte*, p. 314 note; Ziebarth, *Griech. Vereinswesen*, p. 65).

L. 1. προτενσιτεύοντος cp. Προτονικία (*Ath. Mitt.* ii. p. 371, No. 171) and Προτογένης (M. N. Tod, *Sparta Catalogue*, No. 503), both from Sparta.

The following corrections in Le Bas-Foucart's text must also be made:—

L. 2. Νεικηφόρου τοῦ Μάρκου for Νικηφόρου τοῦ Μί[κ]κου.

L. 6. Σώσιμος Νεικ[ο]κρατί(δ)[α] for Ζόσιμος Νι[κο]δα[μ]ίδα.

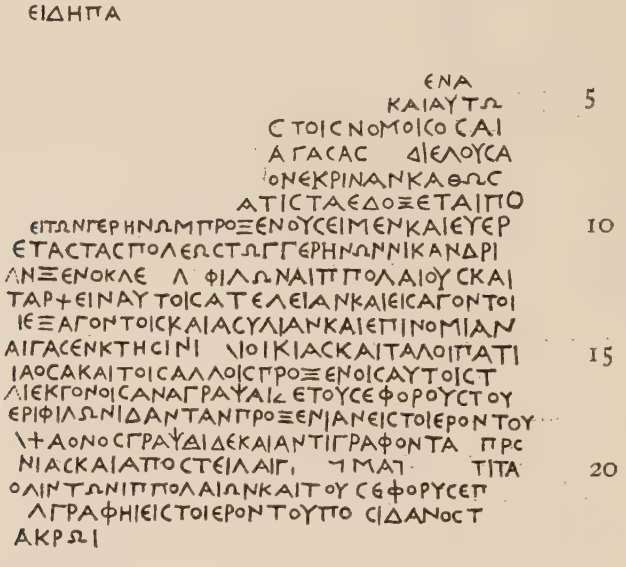
L. 7. ΕΥΔΑΜΟΣ Β ΝΕΙΚ - - - for Εὔδαμος Ἀντικλέ[ους]. We may perhaps transcribe Εὔδαμος (Εὐδάμου) Νεικ[ία], though the omission of τοῦ before Νεικ[ία] is unusual: it is perhaps due here to want of space.

L. 9. Ἀνείκητος ΠΑΝΙ - - - -, *e.g.* Παν(κ)[ρατίδα] for Ἀνείκητος β' τοῦ Νικάτα.

The last line has now disappeared except for some traces of lettering towards the end.

21. Levctro (Leuctra), in house near *skala*, stele of red marble, ·61 m. × ·30 m.: letters ·008. The stone is entire except at the right hand top corner, but the surface of the upper part of it is very badly damaged and

in many places no trace of lettering remains. At the foot is a projection for insertion into a socket.



[Ἐπ]ειδὴ

ενα
καὶ αὐτω
τοῖς νόμοις ὅσα
ἁπάσας διέλ<ο>υσα[ν]
ον ἔκριναν καθὼς
ἄτιστα. Ἔδοξε τâι πό-
[λ]*ει τῶν* Γερηνῶμ *προξένους εἶμεν καὶ εὐερ-*
[γ]*έτας τâς πόλεως τῶγ* Γερηνῶν Νικανδρί-
[δ](*α*)*ν*, Ξενοκλε[*ίδ*](*α*)[*ν*], Φίλωνα Ἱππολαίους, *καὶ*
[*ὐ*](*π*)*άρχειν αὐτοῖς ἀτέλειαν καὶ εἰσαγόντοι*[ς]
[*κα*]*ὶ ἐξαγόντοις καὶ ἀσυλίαν καὶ ἐπινομίαν*
[*κ*]*αὶ γâς ἔνκτησιν* (*κα*)*ὶ οἰκίας καὶ τὰ λοιπὰ τί-*
[*μ*]*ια ὅσα καὶ τοῖς ἄλλοις προξένοις, αὐτοῖς τ*[*ε*]
[*κ*](*α*)*ὶ ἐκγόνοις· ἀναγράψαι* (*δ*)*ὲ τοὺς ἐφόρους τοὺ*[ς]
[*π*]*ερὶ Φιλωνίδαν τὰν προξενίαν εἰς τὸ ἱερὸν τοῦ*

[M](*α*)*χάονος, γράψ*(*α*)*ι δὲ καὶ ἀντίγραφον τᾶ*[*ς*] *πρ*(*ο*)-
[*ξε*]*νίας καὶ ἀποστεῖλαι γ*(*ρ*)[*ά*](*μ*)*μα*(*τ*)[*α πο*]*τὶ τὰ*[*ν*] 20
[*π*]*όλιν τῶν Ἱππολαίων καὶ τοὺς ἐφόρ*(*ο*)*υς ἐπ*[*ὶ τᾷ*]
[*ἀν*](*α*)*γραφῆι εἰς τὸ ἱερὸν τοῦ Ποσιδᾶνος τ*[*οῦ ἐ*]-
[*πὶ*] *ἄκρωι.*

Mr. Tod sends me a few additional letters for line 1 (about two-thirds of way through), *ν οἱ δικαστα*[*ί*], which are important as indicating the services for which the *προξενία* was granted.

For the site of Gerenia see above, p. 161: for conjectures as to that of Hippola see Mr. Frazer's note *ad* Paus. iii. 25, 9. That at the date of this inscription both of these cities were members of the Eleuthero-laconian League is shown by the fact that a copy of the inscription is to be set up at the temple of Taenarian Poseidon, the meeting place of the League. According to Pausanias (*loc. cit.*) Hippola was in ruins in his day, hence it is not included in the list of Eleuthero-laconian cities which he gives (iii. 21, 7).

It is interesting to find the temple of Machaon indicated as the principal shrine of Gerenia, since it is also mentioned as such by Paus. (iii. 26, 7). Strabo (viii. 4, 4) refers to the Temple of Triccaean Asclepius there, which seems to show that Asclepius and Machaon were worshipped together.

L. 7. *διέλουσα*[*ν*] seems to be an error for *διέλυσα*[*ν*], 'put an end to' or 'reconciled.'

L. 19. *γράψαι* written ΓΡΑΨΔΙ by error of lapidary.

L. 21. The second *ο* of *ἐφόρους* omitted by error of lapidary.

L. 22. The second Α of *ἀναγραφῆι* was written Λ and never crossed.

L. 23. The more usual formula for Taenarian Poseidon seems to be *ὁ ἐπὶ Ταινάρῳ* (Collitz-Bechtel 4593, 4594).

22. Do.: Now in Gytheion Museum. Small base, two sides of which have similar wreath and inscr., ·18 m. × ·11 m.: letters ·01 m.

ΓΙΡΚΛΛΕΩ
ΝΙΔΑCΥΟC
ΑΣΚΛΗΠ

(Τ)*ιβ*(*έριος*) Κλ(*αύδιος*) Λεω-
νίδας ὑὸς
Ἀσκληπ[*ιῷ*].

For the important cult of Asclepius at Leuctra, see Paus. iii. 26, 3.

23. Kardamyle, at well near stream, N. of lower town. Fragment of white marble funeral stele, ·51 m. × ·45 m., thickness ·08 m., sawn off at the top to a point: letters ·04 m.

['A](γ)άσιπ(π)[ος]
Ξενόσστ[ρατον]
τὸν υἱὸν ἥ(ρ)[ωα].

All the letters here have *apices*.

For the double σ, cp. G. Meyer, *Griech. Gram.*, p. 304 f., and S. Reinach, *Traité d'Épigr. Grecque*, p. 257 f.

For ἥρωα of deceased persons in Laconia, cp. Collitz-Bechtel 4506 4507, and M. N. Tod, *Sparta Catalogue*, No. 589.

24. Palaiochora (Abia), built into πύργος near Church of the Παναγία. Architectural fragment of white marble from tomb, 1 m. high, ·23 m. broad, with projecting cornice above and fluting below: letters ·05 m.

ΙΤΡΑΤΟΝΙΚΟΣ	(Σ)τρατόνικος
ΚΑΡΧΙΠΠΑΝ	'Αρχίππαν
ΑΡΙΣΤΕΑΤΗΝ	'Αριστέα τὴν
ΕΙ ΓΟΝΟΝ	ἔ(κ)γονον.

There seem to be traces of lettering on the cornice above.

The name 'Αριστέας recurs at Abia (*C.I.G.* 1307).

In conclusion, I wish to express my warmest thanks to Mr. M. N. Tod, who has not only helped me in the elucidation of these inscriptions, but has also in many cases examined the stones, and to Dr. Adolf Wilhelm for assisting me in the interpretation of No. 14.

II.

INSCRIPTIONS FROM GYTHEION AND THE NEIGHBOURHOOD.[1]

Introduction.

The following inscriptions include all those in Gytheion and the neighbourhood which either have never been published or have already appeared but require some correction. A large number of those published by Le Bas, particularly the longest of them, have since disappeared. This is doubtless due to the great demand for building material which the growth of the modern town has caused in recent years.

When visited by Leake early in the nineteenth century it was little more than a village under the name of Marathonisi, lying along the foot of the hill of Kumaro.[2] It has now extended both up the face of the hill and to the N., where it is already beginning to cover Palaeopolis, the site of the ancient town. The result has been twofold. In the first place, every available stone suitable for building purposes has been carried off, and little remains above ground—the theatre excavated by Mr. Skias for the Greek Archaeological Society in 1891 is the only existing building of any importance now visible. Numerous inscriptions must thus have been built into houses, and more than one such was rediscovered while I was at Gytheion.[3]

Secondly, another effect of this growth has been an extension of the town up the valley of the Gytheion River, where now runs the Sparta road. This was evidently also the line of an ancient road which was lined with tombs. It is here that in digging for the foundations of new houses numerous inscribed stelae have been discovered, and this fact accounts for the number of funeral inscriptions in this paper.

Unfortunately, nothing has been found in recent years which can compare in interest with the two well-known early rock-cut inscriptions at the foot of Mt. Kumaro. The existing inscriptions, however, are numerous

[1] Nos. 1–5, 9, 10, 13–15 have been published by Professor J. B. Patsourakos, of Gytheion, Πραγματεία περὶ τοῦ ἀρχαίου Γυθείου (Athens 1902): his readings, however, require correction and no restorations are given.

[2] See British Admiralty Chart and Map in Le Bas, *Voyage Arch.*, *Itinéraire*, Pl. 26.

[3] *E.g.* Le Bas-Foucart 234e.

enough to show that throughout the last three centuries B.C. and the first two centuries A.D. Gytheion still retained some of the prosperity which it had enjoyed as the port of a dominant Greek State.

From the Town of Gytheion.

1. Gytheion Theatre, poros block built into the foundations of the stage-buildings, ·92 m. × ·32 m.: letters ·07 m. in l. 1, ·12 m. in l. 2; they were filled with red stucco.

ΦΙΛΗΜΩΝΘΕΟΞΕ — - - - (Φ)*ιλήμων Θεοξέ*[*νου*]
ΜΟΝΟΣ — [*Θεόξενος Φιλή*]*μονος*

All these letters have *apices*.

The same two men are commemorated in an honorary inscr. from Gytheion (Collitz-Bechtel 4567; Le Bas, *Rev. Arch.* 1845, p. 207; Le Bas-Foucart 243) as having repaired *ἐκ τῶν ἰδίων βίων τὸ ἱερὸν τὸ τοῦ Ἀπόλλωνος τοῦ ποτὶ τᾶι ἀγορᾶι, ὃ καὶ ἦν ἐκ παλαιῶν χρόνων κατηρειμμένον* κτλ., and as *δαπάναν καὶ ἔξοδον μεγάλαν ποιούμενοι ἐκ τῶν ἰδίων βίων ἕνεκα τοῦ καὶ τὰ πρὸς τοὺς θεοὺς τηρεῖν δίκαια, καὶ τὰν ἰδίαν πατρίδα ἐφ' ὅσον ἐν δυνατῶι συναύξειν*.

This fragment, which is not in its original position, may have formed part of an inscription on some other building set up or restored by Philemon and Theoxenos. Collitz-Bechtel remark of the honorary inscr.: 'Die Inschrift gehört in die vorsullanische Zeit,' and our fragment is probably of about the same date. Some time probably would elapse before the material of one structure would be used again for another: this confirms what is likely on other grounds, viz., that these stage buildings were not erected till well into the Imperial Epoch (cp. A. N. Skias *Πρακτικὰ τῆς Ἀρχ. Ἑτ.* 1891, pp. 71 ff.).

2. Gytheion Museum: block of coarse bluish marble, ·43 m. × ·51 m., broken to left and damaged to right, though the edge is here preserved; letters ·035 m.

- - - - - - - - - - (Θ)ε(α)[ῖς Δεσ](π)οίν(α)-
[ις - - - -? Ἀπολλ](ω)νίου [αὐτ](ὸ)[ν] (τ)ὸν (ν)[α]-
[? ὸν καὶ τὰ ἀγάλματα] ἐκ τῶν ἰδίων κ(α)-
[τεσκεύασεν.]

L. 1. Θεαῖς Δεσποίναις seems the most probable restoration and fits the space. The fourth fragment of a letter is certainly π. Θεαὶ Δέσποιναι is used of Demeter and Kore together (*e.g.* Roehl, *I.G.A.* 501). For worship of Demeter at Gytheion, cp. Paus. iii. 21, 7; Collitz-Bechtel 4572, and perhaps Le Bas-Foucart 240, and 243 a, l. 40.

L. 2. -ωνίου is clearly the end of the name of the dedicator's father.

3. Do.: rough column, broken; diameter ·24 m., height ·20 m., letters ·01 m.; found on the top of the Acropolis Hill: probably base of statuette.

A

ΤΟΚΟΙΝΟΝΤ
ΣΙΑΣΤΩΝΙΟ
ΓΩΤΑΤΗΝ
ΤΩΑΞΙΟΛΟ
ΡΙΤΟΝΘΕ
ΘΙΑΣΟΝΕΥ
ΑΠΟΔΟΝΤΙ
ΤΩΓΓΙΤΗ

N

Ἀ[γαθῇ τύχῃ.]
τὸ κοινὸν τ[ῶν - - - - - - - Διονυ]-
σιαστῶν Ἰο[βάκχων - - - - τὴν ἀξιολο]-
γωτάτην - - - - - - - - - - - - -
τῶ ἀξιολο[γωτάτω - - - - - τῆς πε]-
ρὶ τὸν Θε[ὸν εὐσεβείας καὶ τῆς πρὸς τὸν]
θίασον εὐ[νοίας ἕνεκα καταξίαν χάρι]ν
ἀποδόντ(ε)[ς] - - - - - - - - - - - -
τῷ (ἐπ)ὶ τῆ[ς Ἀκροπόλεως ἱερῶ?]

An inscr. in honour of a lady, whose name is lost, set up by a religious society for the cult of Dionysus, of which she was a benefactress.

L. 2. [Διονυ]σιαστῶν, the κοινόν was in honour of a male deity (τὸν Θε[ὸν], l. 6), and Dionysus is the only god whose votaries are denoted in inscriptions by a word ending in -σιαστῶν.

L. 3. Ἰο[βάκχων], which seems the most probable reading, confirms [Διονυ]σιαστῶν. Ἰόβακχοι occurs elsewhere in an inscr. found by Dr. Dörpfeld between the Pnyx and Areopagus, published by Dr. S. Wide (*Ath. Mitt.* 1894, pp. 248 ff.).

L. 5. The Doric genitive is noticeable: such lapses into dialect are not rare in Laconian inscriptions.

L. 7. [καταξίαν χάρι]ν ἀποδόντ(ε)[ς], cp. καταξίας χάριτας ἀποδιδόντες (*I.G.* xii. 1, 155 d, 11) and χάριτας ἀποδιδόναι καταξίας (Dittenb. *Syll.*² 187, l. 44).

On this class of inscriptions see E. Ziebarth, *Das Griech. Vereinswesen*, pp. 33–69. They occur frequently in Asia Minor and the Islands, but are rare in Greece itself except at Athens. Societies for Dionysus-cult are found at Rhodes (*I.G.* xii. 1, 155), Lindus (*ib.* 937), Magnesia ad Maeandrum (*B.C.H.* 1893, p. 32), Perinthus (Dumont, *Inscr. de la Thrace*, 72 c); also at Athens (*I.G.* iii. 1337, ii. pt. 5, 623 d, and see above).

It is noteworthy that dedications in honour of ladies are particularly common at Gytheion.

4. Do.: fragment of white marble, broken on all sides: measuring in height ·13 m., in length ·06 m., letters ·025 m.

ΛΟΝ
ΣΝΑ
ΞΕΠΙΝ
ΓΕΤ

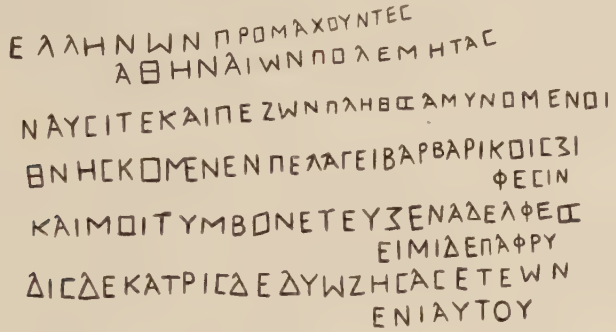
5. Do.: sphere of coarse marble from Acropolis Hill; diameter ·15 m.: letters ·02 m.

Μ

Perhaps a weight = 100 minas.

6. Gytheion: found in digging foundations of shop of Λασκάρης, on the Sparta road, where inscr. still lies. Thin slab of white marble, ·23 m. × ·29 m., with irregular edge; letters, which are very uneven, about

·017 m. Published by Condoléon (*R.E.G.* 1904, p. 2), who, however, gives the inscription in minuscules only.

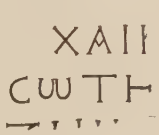


Ἑλλήνων προμαχοῦντες Ἀθηναίων πολεμητάς
νανσί τε καὶ πεζῶν πλῆθος ἀμυνόμενοι
θνήσκομεν ἐν πελάγει βαρβαρικοῖς ξίφεσιν·
καί μοι τύμβον ἔτευξεν ἀδελφεὸς, εἰμὶ δ' ἐπ' ἀφρῦ (sic)
δὶς δέκα τρὶς δὲ δύω ζήσας ἐτέων ἐνιαυτοῦ (sic).

Carelessness of the lapidary may account for the wrong spelling of *ἀφροῦ* and *ἐνιαυτούς* in lines 4 and 5. L. 1 imitates an epigram, *apud* Lycurg. *Leocr.* 111 (*Or. Att. ed.* Bekker, vol. iii. p. 268), attributed to Simonides (*Poetae Lyrici, ed.* Bergk.,[4] vol. iii. p. 449), Ἑλλήνων προμαχοῦντες Ἀθηναῖοι Μαραθῶνι. This seems to show that Ἑλλ. προμ. Ἀθ. go together, and πολ. is governed by *ἀμυν.*, unless, indeed, it is a mistake of the lapidary for *πολεμισταί*.

The forms of the letters are very late. It may therefore be a late copy of an earlier inscription: or else it may refer to the defeat of the Goths by land and sea at Athens in the middle of the third century A.D. (*Hist. Aug.* xxiii. 13, Orosius, vii. 42: see Gibbon, *Decline and Fall, ed.* Bury, i. pp. 256–257).

7. Gytheion Museum: top of stele of white marble, ·21 m. × ·24 m.: letters ·04 m.



χαῖ(ρ)[ε]
Σωτ(ήρ)[ιχος ?]
(Ζήν)[ωνος ?]

8. Do.: top of grave-stele of white marble, found in digging the foundations of a house on the Sparta road, opposite the Church of Hagia Triada. The apex is elaborately ornamented with acanthus leaves. Two sides, measuring respectively ·27 m. × ·12 m. and ·24 m. × ·12 m., are inscribed: letters ·03 m.

ΠΑΝΘΗΡΙ ⁻	ΠΡΩΤΟΓΕΝΟΥΣ	*Πανθηρίς*	*Πρωτογένους*
ΧΑΙΡΕ	ΘΥΓΑΤΗΡ Ƨ	*χαῖρε*	*θυγάτηρ.*

The name *Πανθηρίς* appears not to occur elsewhere: but *Πάνθηρος* (*C.I.G.* 1279), *Πανθήρας* (*ib.*) and *Πανθηρίσκος* (*C.I.G.* 1278) are found at Sparta.

9. Do.: fragment of white marble of architectural form with triglyph above, ·32 m. × ·41 m.: letters ·035 m.

ΛΕΙΔΑ*Χ/	[? *Δαμοκ*]*λείδα*, Χ(*α*)[*ρίξενε* ?]
ΧΑΙΡΕ⁻	*χαίρε*(*τ*)[*ε*].

10. Do.: fragment of tomb inscription found near the rock of *Πελεκητό*, ·12 m. × ·15 m.: letters ·025 m.

ΘΕΟΔ	*Θεό*(*δ*)[*οτος* ? - - - - - -]
ΙΑΤΡΟΣ	*ἰατρός* [- - - - - - *τῇ* ?]
ΕΑΥΤΟ	*ἑαυτο*[*ῦ γυναικί* ?]

The first line probably contained the name and patronymic of the person who set up the stone, the second line his profession and the name of the person commemorated, the last line a statement of their relationship.

11. Do.: slab of white marble built into winepress in vineyard immediately E. of the theatre: letters ·03 m.

ΟΓΕΝΟΥΣ	- - - - *ογένους*
ΑΛΟΥ	- - - - *άλου*

12. Do.: outside Church of Hag. Demetrios. Le Bas-Foucart No. 245. The following corrections should be made:—

L. 3. L.B.-F. read ΑΞΙΟΛΟΓΩΤΑΗ, the stone reads . . . ΗΝ.
L. 5. „ „ ĀΜΙΝΔΙΟΥ, „ „ „ ΑΜΙΝΔΙΟΥ.
L. 9. „ „ ΞΕΝΑΡΧΙΔΑ, „ „ „ ΞΕΝΑΡΧΙΔΑ.
L. 12. „ „ ΑΠΟΛΛΩΝ, „ „ „ ΑΠΟΛΛΩΝΙΟΥ.

(Le Bas-Foucart No. 243 is also now built into the S. wall of this Church.)

13. Gytheion: outside the *Νομαρχεῖον*. Block of white marble ·57 m. × ·66 m.: letters ·04 m. Published by Mr. A. N. Skias, *Ἐφ. Ἀρχ.* 1892, pp. 193 f. No. 4.

ΚΑΙΣΑΡΟΣ
ΗΠΟΛΙΣΑΠΟΚΑΤΑΣ
ΣΑΝΤΑΜΕΤΑΤΟΥΠΑ
ΤΗΝΑΡΧΑΙΑ[ν]

Καίσαρος
ἡ πόλις ἀποκατασ[τή]-
σαντα μετὰ τοῦ πα[τρὸς]
τὴν ἀρχαία(ν) [πολιτείαν?]

L. 1. Skias reads _ι ικ ικ: *Καίσαρος* is certain; the letters before it are lost.
L. 2. Skias restores *ἀποκατασ[ταθεῖσα] - - - - [τὸν δεῖνα]*, which is too long and does not fit the *-σαντα* of l. 3: *ἀποκατασ[τή]-σαντα* (= having completely re-established, cp. *ἀποκατέστησε τὰν πάτριον πολιτείαν*, in Decree of Byzantium, *apud* Demosth. xviii. 112) seems more satisfactory.

The inscription is perhaps in honour of the Emperor Tiberius, who is not otherwise represented among honorary inscriptions to emperors found at Gytheion. The first part would have consisted of his titles, and *ἀποκαταστήσαντα κτλ.* would refer to the privileges bestowed by his adoptive father Augustus upon the Eleuthero-laconian League (Paus. iii. 21, 6; cp. Mommsen, *Provinces of the Rom. Emp.* i. p. 260).

14. Gytheion Museum. Skias, *loc. cit.* p. 196 ff. No. 7. This inscription, which was only lately removed to the Museum, has suffered severely since Mr. Skias saw it, having been used as a doorstep: a squeeze showed nothing. The copy here given will be found in some cases to support, in others to supplement, Mr. Skias' reading. The inscription consists of four separate poems all in memory of the boy Attalus; the divisions are marked in the margin of the stone.

(α) πέντε με καὶ δέκ' ἐτῶν ὁ βαρὺς μίτος ἤ(ρ)πασε (Μοιρ)ῶν,
Ἄτταλε, σεμνοτάτης μητρὸς ⏑ – ⏑ ⏑ ης·
τὸν σοφίαν ἀσκοῦντα ⏑ – ⏑ ⏑ – ⏑ ⏑ – –
Ἄτταλον εὐμοίρῳ χρησάμενον (μ)ο[ρί]ῳ.
το(ίγαρ) μὴ λυπεῖσθε ⏑ – ⏑ ⏑ – ⏑ ⏑ – – 5
εἰ φίλον ἐστὶ θεοῖς ὀξ[ὺ]ν (ἔ)χειν (θά)νατον.

(β) Ἄτταλος ἐνθάδ' ἔφηβος ἔτη (ζ)ήσ[ας] δεκ[ά]πεντε
κεῖται τὴν Μουσῶν – ⏑ ⏑ – σοφίην.
τοῦτο δὲ δυστήνοισιν ἐν ἀνθρώπ[οι]σ(ι)ν ἔ[δ]ε[ιξ]εν
θνήσκων, ὡς (ἀγ)αθ(ὸ)ν πᾶν [ὀ]λιγοχρόνιον. 10

(γ) Ἄτταλον ἀκμάζ[ο]ντα κα[λ]ὸ(ν κ)α(ὶ) χρηστὸν ἔφηβον
ἥρπαξεν ταχινὴ μοῖρα πρὸς ἀθανάτους,
οὔπω γευσάμ[εν]ον ⏑ ⏑ – ⏑ ⏑ σ[ὺν] δὲ γονεῦσιν
ζήσανθ' ἡλικίην [? conj. εἰς δεκαπενταετῆ.]
ὁ χρόνος ἀνθρώποις ⏑ ⏑ – ⏑ ⏑ – ⏑ ⏑ – – 15
– ⏑ ⏑ – ⏑ ⏑ – – ⏑ ⏑ – ⏑ ⏑ –

(δ) χαίροις ὦ παροδῖτα ⏑ – ⏑ ⏑ – ⏑ ⏑ – –
Ἄτταλος, ὃν (δ)αίμων ἥρπασε – ⏑ ⏑ –
ἀλλὰ πατρὸς ⏑ ⏑ – ⏑ ⏑ – ⏑ ⏑ – ⏑ ⏑ – –
μητρὸς δε ⏑ ⏑ – – ⏑ ⏑ – ⏑ τύχης. 20
ἡλικίην, μάθε, λοιπὸν ἐτῶν θνήσκω δεκ[άπεντε]
τῆς ἀρετῆς ἐλθὼν τῆ[ς] μεγ(ά)[λ]ης ἐπ' ἀκ(μ)[ήν].

15. Do.: fragment of grave stele, broken off at the top, measuring ·46 m. × ·43 m.: letters ·035 m. Published by A. N. Skias, *loc. cit.* p. 203, No. 10.

- - - - - - -
[καὶ Φ](ιλο)κλείδα
χαίρετε.

Mr. Skias reads ΙΓCΚΛΕΙΔΑ, which certainly is not borne out by the stone, and restores [δεῖνα καὶ | Νι](κο)κλείδα | χαίρετε. The above seems

the most probable restoration. At each side of the inscription is engraved a curious and very rough representation, apparently of a funeral stele.

From the Neighbourhood of Gytheion.

16. Near Mavrovouni, 2½ kilometres south-west of Gytheion: fragment of the white marble cornice of a tomb built into the steps in front of the house of Νιαγγοράκος, ·65 m. × ·14 m.: letters ·03.

ΗΡΙΔΑΝΟCΚΑΛΛΙΟΠΗΤΗΙΔΙ/

Ἡριδανὸς Καλλιόπῃ τῇ ἰδί(ᾳ) [*θυγατρί or γυναικί*].

Ἡριδανός is found as a proper name on coins of Chios (*Brit. Mus. Cat. of Coins, Ionia, etc.*, p. 331–2).

17. Near village of Chosiari (the later city of Las), 9 kilometres south-west of Gytheion, at the well of Βασίλειος Ζευγολατάκος: two fragments of a grave inscription, (1) with Διοκλῆς, ·32 m. by ·17 m.; (2) with the rest of the inscription, 1·31 m. by ·17 m., joined with a ⌐—┘ shaped clamp. The letters measure ·035 m.

ΔΙΟΚΛΗΣ ΕΥΔΑΜΙΔΑΣ Κ/ΛΗΡΑΤΟΣ
ΙΕΡΟΣΧΑΙΡΕ ΚΛΕΑΡΧΟΣΕΙ

Διοκλῆς Εὐδαμίδας Κ[αλ]ήρατος
ἱερὸς χαῖρε Κλέαρχος Ε - - - - -

The third name in the first line appears to be Καλήρατος, a name not otherwise found; but the form Φιλήρατος occurs (*I.G.* ii. 3098). Ἱερὸς of the deceased is found elsewhere in Laconia (Collitz-Bechtel, 4580, at Pyrrhichus; 4582, at Teuthrone).

18. Village of Chosiari, at a small khani on the site of Las, 8 kilometres south-west of Gytheion; fragment of white marble tomb-inscription, ·73 m. by ·09 m.: letters ·03 m.

ΝΕΧΑΙΡΕΘΕΤΗ
ΙΩΓΑΙΟΙΓΙΔ

- - νε χαῖρε ἔτη
[β]ιώσας ΙΓ′ (13).

19. Levetsova, 18 kilometres north-east of Gytheion: inscription on Dioscuri relief built into village fountain. The first line only is published

by Dressel and Milchhoefer, *Athen. Mitt.* ii. p. 389 (after Ross, *Königsreisen*, ii. p. 242), the first two lines in *C.I.L.* iii. 493.

DIIS · CASTORI · ET · POLLVCI · SACRV[M]
DOMVS · AVGVSTI · DISPENSATOR
DEDIT · ET · DEDICAVIT

I wish most gratefully to acknowledge the generous assistance of my friend Mr. M. N. Tod in the elucidation of these inscriptions, and to thank Prof. Patsourakos of Gytheion for pointing out numerous inscriptions and giving me every facility in the Museum under his charge.

EDWARD S. FORSTER.

ADDITIONAL NOTE ON INSCRIPTION NO. 15 FROM KOUTIPHARI.

(*See page* 173 *above.*)

I have just received impressions of the whole of this inscription from Mr. Bosanquet, who has had it removed from the window-sill of the schoolhouse.

	ΝΙΚΟΣΘΕΝΙΔΑΣΤΑΙΠΑΗΙΦΑΙ	*Νικοσθενίδας τâι Παηιφâι*
	ΓΕΡΟΝΤΕΥΩΝ ΑΝΕΣΗΚΕ	*γεροντεύων ἀνέσηκε*
	ΑΥΤΟΣΤΕΚΑΙΙΙΟΤΩΠΑΤΡΟΣΠ	*αὐτός τε καὶ ho τῶ πατρὸς π-*
	ΑΤΗΡΝΙΚΟΣΘΕΝΙΔΑΣΠΡΟΒΕΙΠ	*ατὴρ Νικοσθενίδας, προβειπ-*
5	ΑΗΑΣΤΑΣΙΩΠΟΤΑΝΔΡΙΑΝΣΥ	*άhας τâ(ς) σιῶ ποτ' ἀνδρίαν συ-*
	ΝΕΦΟΡΕΥΟΝΤΑΑΝΙ ΤΑΜΕΝ	*νεφορεύοντα ἀνι[σ]τάμεν*
	ΝΙΚΟΣΘΕΝΙΔΑΝΕ ΤΩΙΙ ΡΩΙΙΙ	*Νικοσθενίδαν ἐ[ν] τῶι ἱ[ϵ]ρῶι h-*
	ΟΝΚΑΙΣΥΝΚΑΛΩΙΧΡΗΣΤΑΙ	*ὸν καὶ σὺν καλῶι χρηστâι.*

L. 4. Προβειπάhας = προϝειπάσας = προειπάσης.

L. 5. ΤΑΣΙΩ is perhaps a mistake of the lapidary for ΤΑΣΣΙΩ = *τâς σιῶ* = *τῆς θεοῦ*.

ΠΟΤΑΝΔΡΙΑΝ presents considerable difficulty: it may possibly = *πρὸς ἀνδρείαν* used adverbially = *ἀνδρείως*.

ἀνιστάμεν must be a Doric present infin. act. of *ἀνίστημι*, depending on *προειπάσης*.

L. 7. χρηστᾶι must be for χρηστῇ, and come from χρήστης, a speaker of oracles. If, as seems probable, we have the whole inscription, it is difficult to see what is the construction of hόν; perhaps the whole phrase is some local formula.

I have again to thank Mr. Tod for his kind assistance.

E. S. F.

May 12, 1905.

THE MONASTERY OF DAOU.

In the last volume of the *Annual* Mr. Heaton Comyn published a description and drawings of this ruined monastery, which lies hidden away among the woods on one of the south-eastern spurs of Mount Pentelicus. It seems worth while to add what little is known of its history, and also some notes on its construction. For the latter I have to thank Mr. Pieter Rodeck, whose extensive knowledge of Byzantine churches enables him to speak with authority.

From a σιγίλλιον of Timotheus, Patriarch of Constantinople, dated 1614, it appears that the monastery was entitled ἡ Σταυροπηγιακὴ Μονὴ τοῦ Παντοιφάτορος Σωτῆρος Χριστοῦ τῆς Ταῶ, and that it had been rebuilt some years before in the time of Jeremias II, whose Patriarchate began in 1572.[1] Presumably the tower at the south end of the church was added at this time. But the expression used, ἀνήγειραν ἐκ βάθρων, implies something more, perhaps the rebuilding of the body of the church. In any case there is reason to think that the domes of the existing church are not contemporary with the main structure. On this point Mr. Rodeck writes: 'The cylindrical portion intervening between the hemisphere of the main dome and the circular string-course, and the angle-domes protruding through the roof, are characteristics of late Byzantine work, and may perhaps date from a more or less extensive reconstruction.' On the other hand the ground-plan, as Dr. Lampakes long ago pointed out,[2] seems to date from the fourteenth or fifteenth century.

'The main distinguishing feature of the church,' Mr. Rodeck continues, 'is the hexagonal instead of octagonal system of arches leading up to the dome, which preclude the possibility of having north and south arches

[1] The documents relating to Daou are published by Mr. D. G. Kambouroglou in his Μνημεῖα τῆς Ἱστορίας τῶν Ἀθηναίων, i. 186 and ii. 49, and in his Ἱστορία τῶν Ἀθηναίων, i. 380.

[2] Δελτίον τῆς Χριστιανικῆς Ἀρχαιολογικῆς Ἑταιρείας, ii. (1892-4), 23–27. Compare his *Mémoires sur les Antiquités chrétiennes de la Grèce* (Athens, 1902), pp. 37, 38.

corresponding to the east and west arches or vaults of the Naos, thus destroying the cruciform system found in the other churches of the Commenian group. This, doubtless, was considered by the Byzantine builders an objection to the hexagonal system, and is sufficient to account for this form of construction not being repeated elsewhere. This objection would not be felt by the Turkish builders of the mosque at Cairo.'

The mosque in question (Fig. 1 in Mr. Comyn's paper) is the Gâmi'a el-Melekeh Sofîya. According to Baedeker's *Egypt*, p. 49, it was built in 1611.

The white marble columns and panels, and the variegated red marble capitals of the screen (Fig. 2 in Mr. Comyn's paper) must have formed part of a still older church, but it is possible that they were brought from elsewhere. The oldest elements in the church are some sculptured marble stele-heads built into the face of the tower, derived perhaps from an ancient site a little to the south-east of the monastery.[1] The finial over the central dome is a marble table-support of familiar classical type.

The destruction of the monastery by pirates is placed by tradition in the latter half of the eighteenth century. The story is most fully related by Kambouroglou.[2]

Daou may be reached in a day's excursion from Athens. It lies far along the Marathon road, within three miles of the eastern shore of Attica, and about the same distance north of the hamlet of Pikermi. Thence it is approached by a footpath, which brings one in forty minutes to the little church of Ἁγία Παρασκευή, and a quarter of an hour later to a group of old plane-trees which mark the confines of the monastery. It is seldom visited now except by shepherds; but traces of an overgrown carriage-road recall the period when Queen Amalia sometimes had her tent pitched here, and spent a long summer day in this cool retreat.[3]

This note must not end without a word of gratitude to Mr. Alexander Skouses, lately Minister of Foreign Affairs at Athens, who was so kind as to put the farmhouse on his Pikermi estate at Mr. Comyn's disposal, and thus provided him with a convenient base of operations.

[1] Compare Milchhöfer, *Karten von Attika, Text*, vi. p. 39.
[2] Ἱστορία τῶν Ἀθηναίων, i. p. 382.
[3] Sir Thomas Wyse, *Impressions of Greece* (London, 1871), pp. 46–48.

R. C. B.

EXCAVATIONS AT PALAIKASTRO. III.

(Plate IV.)

§ 1.—Nomenclature.

The rapid increase of our knowlege of prehistoric Aegean antiquities has inevitably brought with it the necessity for repeated amplification of nomenclature. In Schliemann's day, and for some time after, 'Mycenaean' seemed easily to cover the field. Presently 'Proto- and Pre-Mycenaean' had to be invented. Until lately in Crete all bronze-age fabrics were divided (and the division was taken as chronological as well as according to style), into Kamáres and Mycenaean, although considerable overlapping was observed. This division, though roughly not untrue of the bulk of the pottery, is now found to be too general. It rested on the fact that the earlier fabrics are prevailing light-on-dark, the later dark-on-light, but neglected the fact that the two styles existed side by side from the beginning, and that their succession is merely a succession of prominence rather than of exclusive existence. Thus these terms can only be fitly used to describe technique, not in a chronological sense. Finer subdivisions are also now possible. Dr. Evans has introduced for this purpose the word 'Minoan' and its divisions, to cover all the Cretan bronze age, using 'Middle Minoan' to cover generally the 'Kamáres period' and 'late Minoan' for the succeeding 'Mycenaean' period when dark-on-light design prevailed, certain considerations of script being taken into account. These are preceded by the 'Early Minoan,' which cover all fabrics between the Neolithic and the 'Middle Minoan.' With regard to the subdivisions of these periods, it is too soon to speak very definitely of the divisions of the Early Minoan at Palaikastro, though this year has largely increased our knowledge. In the Middle Minoan period we can

recognize clearly two well-represented divisions. The first comprises the fine ware from the ossuaries, and is Class A of last year's report (*B.S.A.* ix. p. 301). The colours used are white and red; the designs are still stiff and quasi-geometric, and no naturalistic decoration is yet found. The second division of this period covers the poorer ware of class B, which was shown last year to be later than Class A. Now, however, deposits in the town, and especially the one from ξ **20** described below in § 5, show that this ware of Class B is really the coarse pottery of a period whose fine ware far excels Class A. The fact that only the coarser vases were found in the cemeteries shows that the people of Palaikastro, like other ancient peoples, discovered that it was not necessary to give the dead of their best. To this second division belongs, in fact, the finest polychrome light-on-dark ware, in which yellow paint is used in addition to the older red and white, and the finest thin egg-shell ware. Of both of these this year we found fine specimens. The designs are now free and floral, and the dark-on-light style becomes commoner. From its freer character the cup shown in *B.S.A.* ix. p. 305, Fig. 4, No. 3, should probably be placed here. Following these comes a style, represented as yet by only a few sherds, clearly earlier than the Late Minoan, and yet later than the finest polychrome ware just described. It marks a stage in the disappearance of the polychrome idea, in the disappearance of the yellow and orange tints used earlier to supplement the red and white, and the buff ground of the clay is seen more frequently, giving the effect of a dark-on-light decoration. These three periods cover the ground of Dr. Evans' Middle Minoan, and we may follow him in calling them Middle Minoan I., II. and III. respectively. Although the decoration of this time is prevailingly light-on-dark, it must be emphasized that the essence of the Middle Minoan style is the use of polychrome effects, and it is this that distinguishes it from the following Late Minoan manner, when the potter relied for his effect solely upon the beauty of the design itself.

Contemporaneously with this change of aim came a strong impulse towards naturalism in design; already in the finest polychrome ware natural flowers are introduced, and the tendency may be seen at its height in vases of the Late Minoan I. period, such as the two from the pit at Zakro, published by Mr. Hogarth in *J.H.S.* xx.

Last year's Report sets out the divisions into which the Late Minoan may be considered to fall, divisions which seem to correspond pretty

closely with the Knossian scheme. Mr. Bosanquet has described (*B.S.A.* ix. p. 281, § 3) two divisions of the Early Mycenaean, illustrating the pottery of both of them, and connecting them with contemporary events that have left their mark on the ceramic history of the neighbouring settlement at Zakro. The first of these divisions seems to correspond with the culture of the Later Palace at Knossos at the end of its First Period, the second to the contents of the Palace at the time of its destruction. To the first of these phases Dr. Evans has given the name Late Minoan I.; objects belonging to the second are classed as belonging to the Palace Style. This latter term is too local for general adoption, and it will be more convenient if we name these two divisions respectively Late Minoan I. and Late Minoan II. To the latter belongs the 'Mycenaean' painted ware described in *B.S.A.* ix. §§ 3–12, pp. 309–314. The rarity of the ware of the earlier period at Palaikastro, with the exception of the earlier stratum in **β 10** and **β 13**, is referred to in *B.S.A.* ix. p. 309. These two periods see the abandonment of the polychrome style, the only relic of which is the use of white paint, still frequent in Late Minoan I. The free naturalism of this latter yields in the second period to the fine spirit of decorative conventionalism of the Palace style, which in its turn gives way to the formalism of the Late Minoan III. This is the pottery of the 'Late Mycenaean period' of the chronological scheme given in *B.S.A.* ix. p. 281, described in §§ 13–15, pp. 315–320, where it is presented as forming two classes, the first, that found in the filled-up bath-room of Block γ, and the second (§ 14), from the latest floor-deposits notably in **γ 9**. These two divisions into which Late Minoan III. falls may provisionally be called Late Minoan III., *a* and *b*. No clear line of division can however be drawn. The earlier shades into the later, just as it itself is reached by a gradual transition from Late Minoan II. wares. To the latter part of this period belongs the Re-occupation of the Palace of Knossos.

With regard to the question of periods and their correspondence from site to site, it must be observed that the history of Cretan pottery shows no breaks, but presents each phase developing out of the preceding one. In a development that is thus a continuous process, 'periods' fixed by examining floor deposits left by a fire or a desertion are no more than sections cut across the ever-changing series. If the disaster is a sufficiently wide one, affecting more than one settlement, there will be actual identity

in the 'periods,' making allowance for local differences. If it have any deep political meaning it may for a time arrest development sufficiently to make the section a real period. If on the other hand it be merely local, such as a fire in a town destroying a few houses, no exact correspondence with the floor deposits left is to be sought on any other site.

Making these reservations the following synchronisms may be set down:—

CRETAN SITES.			NON-CRETAN SITES.
PALAIKASTRO.	KNOSSOS.	OTHER SITES.	
Early Minoan. H. Nikólaos burial. *B.S.A.* ix. p. 336. Τὰ Ἑλληνικά and early strata in δ **32**. See following report. Earliest elements in ossuaries.	Early deposits.	*Zakro.* Early Cave-Burial. *B.S.A.* vii. p. 144. *H. Onouphrios* deposit. Evans, *Cretan Pictographs.* Pottery from *Vasilikí* near *Gourniá*, and early Geometrical ware from *Gourniá*.	*Cycladic* and *Amorgan* period. *Troy.* Second City. *Phylakopi.* The First City comes between this and the next period.
Middle Minoan. (*a*) Middle Minoan I. 'Class A' from ossuaries and town deposits. *B.S.A.* ix. p. 303. (*b*) Middle Minoan II. 'Class B' from ossuaries and town deposits (*B.S.A.* ix. p. 304), and deposit in ξ **20** (see report following). (*c*) Middle Minoan III., represented by a few fragments in ξ **20**.	Earlier Palace and period of foundation of the Later Palace, cf. *B.S.A.* ix. p. 21, note, and x. p. 13.	*Phaestos.* Earlier Palace. Deposit in the *Kamáres* Cave.	*Phylakopi.* Some Kamáres ware found in the Second City.
Late Minoan. (*a*) Late Minoan I. Burned stratum in β 10 and 13 (*B.S.A.* ix. p. 284), and rare remains elsewhere in the town.	Late Minoan I.; phase reached at close of First Period of Later Palace.	*Zakro.* The pottery from the pits. *B.S.A.* vii. *J.H.S.* xxiii. p. 248. The greater part of *Gourniá* deserted at this time.	*Phylakopi.* Second City. See Melian or Theran vase found in Knossian Temple Repository. *B.S.A.* ix. p. 50. *Mycenae.* Shaft graves begin.

CRETAN SITES.			NON-CRETAN SITES.
PALAIKASTRO.	KNOSSOS.	OTHER SITES.	
(*b*) Late Minoan II. Block β 1–22 deserted. Floor deposits in ξ, ε, and fillers from δ.	Palace style. The phase reached at the destruction of the Later Palace.	*Zakro.* Pottery from houses. *J.H.S.* xxiii. p. 254.	*Phylakopi.* Second or Early period of third city. *Vaphio* tomb. *Mycenae.* Shaft graves end.
(*c*) Late Minoan III. (1) L.M. III. *a.* Bathroom in γ filled up. Λάρναξ burials on cliff. Latest floor deposits in δ and π. (2) L.M. III. *b.* Latest floor deposits in γ. Bee-hive Tomb (*B.S.A.* viii. p. 303).	Re-occupation period.	Tombs at Kalývia near Phaestos (unpublished).	The later part of this period is represented by the ware of *Ialysus*, *Tel-el-Amarna*, etc. It is the period of the 'widest diffusion' of Mycenaean pottery. The centre of the Mycenaean wôrlds shifts to the mainland.
Iron age. Geometrical Pottery.			

The periods specially illustrated by this season's work are the Early Minoan and Late Minoan III *a*. The pottery of 'Class B' has been raised to its rightful position as the humbler ware of the Second Middle Minoan period by the discovery of the finer fabrics that are contemporary with it, whilst the quantity of Late Minoan I. pottery has been largely increased. The several new fabrics, almost new to Palaikastro, that fall under the Early Minoan will be described, with the circumstances of their discovery, in the following section.

§ 2.—Τὰ Ἑλληνικά AND EARLY MINOAN DISCOVERIES.

Although the slopes of the *καστρί* had been rifled by native diggers there were indications on the southern side, at a site called Τὰ Ἑλληνικά, that something still remained. The trial pits struck at once two small burial-enclosures, lying close together. The northern of the two proved to be a structure some six by seven metres, with the western wall lacking,

divided into two unequal compartments. The earth was very shallow, and the walls, only a foot or so high, almost appeared above the surface. The objects found in it were Early and Middle Minoan; the burial is thus the earliest yet found at Palaikastro. One compartment contained a few bones and a fragment of a skull, the other nothing that could be identified as a human bone, but a number of Early and Middle Minoan vases, a very finely worked shallow stone basin with four lug-handles, a fragment of a triton-shell, an object constantly found in the ossuaries, and,

FIG. 1.—EARLY MINOAN VASES. (Scale 1 : 6.)

perhaps the most interesting of all, a small clay model of a flat-bottomed boat with a raised prow and the remains of two thwarts.

The position of the vases and other objects, not with the remains, as in the Middle Minoan ossuaries, but in a separate though adjacent and communicating compartment, is of great interest. From the small number of bones it would seem that this was the tomb of one man only. After burying the body in the one compartment, it seems as if the other was left open as a sort of mortuary chapel for offerings,

and the vases used for this purpose allowed to accumulate. By means of these vases we can date the burial. Besides a number of fragments, twenty-five vases were found fairly complete. Of these three resembled egg-cups, eleven were long-nosed jugs, and eleven were small Middle Minoan vases like those from the other ossuaries. The Early Minoan character of the egg-cups and long-nosed jugs is proved by the discovery this year of fragments of similar vases stratified below Middle Minoan remains in the excavation of δ **32** described below. Fig. 1 shows these jugs and cups together with the boat. The jug *i* with stripes of dull black paint is also shown in Fig. 3, *b*. The finding of both Early and Middle Minoan vases here shows that the continuous tendance of the tomb lasted on into Middle Minoan times. The discovery also this year at Patema of a two-faced ivory stamp and a bronze dagger, both of forms which, thanks to recent discoveries at H. Triadha near Phaestos supplementing the deposit at H. Onouphrios, can now be definitely set down as Early Minoan, show clearly that some of these Middle Minoan ossuaries were already in use in the preceding period.

The full bearing of the Early Minoan ware in this burial is apparent when it is connected with the finds above-mentioned in the deeper strata underlying δ **32**. This was a small paved room belonging to the Late Minoan III Mansion. Below the pavement and at the level of the foundation of the ashlar wall that bounds the room on the west, were found cups of the early cemetery types shown in *B.S.A.* ix. p. 302, Nos. 1 and 2, belonging, that is, to the early part of the Middle Minoan period. Below the ·60 m. occupied by this stratum was ·50 m. of earth containing but few sherds, but amongst them some showing geometrical designs of hatched triangles and circles on a dark ground. The best, and amongst them one with a similar design in dark-on-light, are shown in Fig. 2, *a*, *g*, *j* and *k*. These were supplemented by a number of such sherds from deep down in a trial trench that was sunk in the field west of Block δ (Fig. 2 *b–f*, *h*, *i*, and *l*).

This ware, the latest that Dr. Evans has classed as Early Minoan,[1] is as yet only thus scantily represented at Palaikastro.[2] The patterns are the same as those described by Dr. Evans, *B.S.A.* ix. p. 18, 19, hatched chevrons, dots, and hatched triangles joined at the apex. These triangles are some-

[1] *B.S.A.* ix. p. 19.

[2] Great quantities of such sherds have now been found at Gourniá.

times formed by the quadrants of a circle, each circle being, as in Fragment *f* in the figure, joined to the next in the pattern by transverse lines producing somewhat the effect of a spiral. Side by side with these patterns are found rough dark stripes laid directly on the clay, as in Fragment *l*. As far as the forms can be made out, cups are as usual most frequent, but hole-mouthed jars and jugs are found. This entirely geometrical

FIG. 2.—EARLY MINOAN GEOMETRIC WARE. (Scale 1 : 2.)

style of ornament is nearly as stiff as the incised patterns which it so clearly imitates. It thus shows us a fresh step in the progress of Minoan art from the rigidity natural to incised work through the stiff early Middle Minoan style to the free naturalism that marks the beginning of the Late Minoan period.

Below this geometrical ware again at a depth of 1·00 below the foundation of the Late Minoan wall was found a thickly packed stratum of broken pottery, ·15 to ·25 thick, resting upon untouched soil. This was identically the same fabric as the Early Minoan vases found in the burial at Tà

Ἑλληνικά. All the pottery was much broken, but it was possible to recognize the shape of the egg-cup vases, the long-beaked jugs, some of the fragments of which were decorated with the same black stripes as the jug from Τὰ Ἑλληνικά shown in Fig. 3, *b*. Cups with a small lug-handle and spout, and a groove along the edge, were also made out. These are identical with a cup found by Mr. Hogarth in an early cave burial at Kato Zakro. It is figured in *B.S.A.* vii. p. 144, Fig. 52, being the first on the left in the second row. It is there associated with incised ware like that from the Palaikastro ossuaries, a geometrical dark-on-light ware, and a cup that looks almost Middle Minoan. As a collection of Early Minoan fabrics this Zakro burial is extremely valuable. Another shape was almost fully pieced together from the δ **32** fragments. This is the one-handled vase with long horizontal spout shown in Fig. 1, *h*, in the bottom row. This extraordinary vessel resembles a vase found in 1902 on the gravel ridge figured in *B.S.A.* ix. p. 307, Fig. 7, No. 1, as the parent of the Middle Minoan bridge-spouted one-handled jars. Both of these spouted vases and many of the sherds show the highly polished surface, red shading into black, noticed by Mr. Hogarth in describing the cup from Kato Zakro. The ware, though well made, shows no certain traces of the use of the wheel. The handles are attached in the peculiar way characteristic of the early geometric ware of Phylakopi.[1] They are stuck through a hole made in the side of the vase, and the clay smoothed off outside and, where the mouth of the vase is sufficiently large for this to be possible, inside also. This set of vases is especially valuable, as both the shapes and the technique are so marked and distinct, that even quite small sherds can be recognized and used for dating the deposit in which they occur.[2]

But δ **32** carries us still further back. In digging out the whole room in search of more of this ware, it was found that the surface of the rock was very irregular. In one place there was a pocket, ·45 to ·55 m. deeper than the rest of the room, which contained the earliest ware of all, although, curiously enough, actually above this ware no sherds of the sort just described were found. Its depth and character, however, leave no doubt as to its earlier date. Though it was all in small pieces it was possible to put together three fairly complete vases. These are roughly hand-made of a smooth reddish clay, without polish or slip. Of the vases put together,

[1] *Phylakopi*, p. 94.

[2] A splendid set of complete vases of this style has been found at Basiliké near Gourniá.

one is a rough jug ·22 m. high, another, shown in Fig. 3 *a*, is a similar jug with a geometrical decoration of hanging loops in white paint, a decoration found also on incised ware. The third vase is of greater interest. It is the upper part of an *askos*, with a much ruined decoration of white lines, which, so far as the handle and fragment of lip preserved go, resemble the geometric beaked jugs from Melos shown in *Phylakopi*, Pl. IX. Except for its more open mouth, another interesting parallel is afforded by the shape given by Dr. Evans, *Cretan Pictographs*, p. 63, Fig. 52 *a*, as taken from the most primitive class of triangular sealstones.

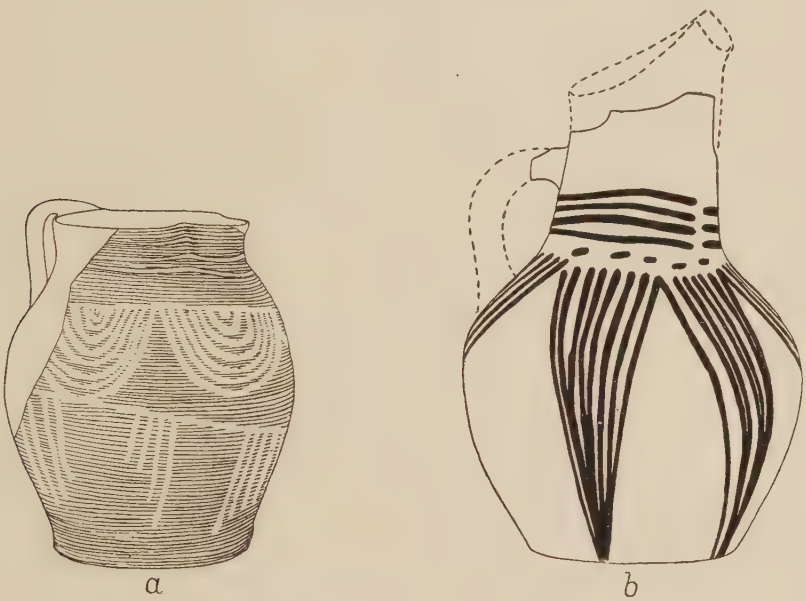


FIG. 3.—EARLY MINOAN JUGS. (Scale 1 : 3.)

Though it is tempting, it would perhaps be premature to take these three successive styles as a basis for establishing subdivisions in the Early Minoan period.[1] The place of the later incised fabrics especially must first be more clearly determined. Meanwhile certain objects found with this pottery are worth recording, as indications of the external relations of Palaikastro at this time. Thus amongst the upper stratum of Early

[1] In a paper read before the Archaeological Congress at Athens after this was written, Dr. Evans was able to class the second of these, the ware of Fig. 1, as Early Minoan II, and the third, the ware shown in Fig. 2, as Early Minoan III.

Minoan ware characterized by the long-beaked jugs were found (1) a fragment of obsidian, and (2) a fragment of an ostrich egg. Two much-broken triton-shells were of course local. The lowest level gave an indication pointing to a positive date, for amongst these sherds was found a clay 'loom-weight' of a somewhat unusual oval form with a circular seal-impression on one side. The design consists of four spirals converging from the circumference, and closely resembles that engraved on two stones in the Candia Museum, one from Knossos and the other from H. Onouphrios.

The structure at Τὰ Ἑλληνικά close by the Early Minoan burial described above was found to be a small Middle Minoan ossuary of the same type as that found on the gravel ridge in 1902 (*B.S.A.* viii. p. 290), but smaller and simpler. It consisted of only two compartments, side by side, enclosed by low walls; one of these was very small, and contained only one burial. This was struck first, and yielded at once a triangular engraved prism-seal of white steatite. The body had rested on a layer of small round pebbles from the sea, such as were often mixed with plaster for the floors in the houses. The only other objects found were a few sherds and a pierced stone. The larger division, about 4·00 by 5·00 m., was on the other hand, quite full of bones, closely packed together. The interments were certainly not all secondary, for there were two clear cases of contracted burials. The bodies, as in the contracted burial found last year at Patema (*B.S.A.* ix. p. 354, Fig. 5), lay on the left side, with the head towards the east. The condition of the bones was worse than in the other cemeteries, and the skulls in particular were much crushed. There was a good deal of pottery, all of the Middle Minoan kind yielded by the other ossuaries. Twenty-three vases were complete, of which eleven were the plain handleless cups shown in *B.S.A.* ix., p. 302, Nos. 6, 6*a*, 6*b*. No painted ware was found. The other finds, besides the prism-seal mentioned above, were, a small bronze button plated with gold foil, two miniature bronze sickles, a quartz crystal, a pair of bronze tweezers and a small stone vase.

§ 3.—Blocks κ and λ.

A little west of the town-site lies a hillock called τὸ Κεφαλάκι or τοῦ Κονᾶ τὸ Κεφάλι, the Κονᾶδες being a family living at Karýdhi, to whom the land formerly belonged. The west side and top of the hillock are

rocky, but on the better covered east and north slopes ancient walls crop up above the surface. The owner of the field on the south side was known to have improved his land by pulling out blocks of stone, but enough ground was left on the east and north with traces of walls to make it plain that a group of houses lay beneath the surface.

A trench by the side of a promising wall soon uncovered the doorway of a house, opening on a street. In the landward direction this street, on each side of which a house was cleared, soon disappeared on entering the field which had been cleared of stones. Efforts, as yet unsuccessful, were made to follow it in the direction of the town, for although the field lying between Κεφαλάκι and House δ has been much cleared by its present owner, yet, from his account of its original condition and from the indications given by trial trenches, it seems clear that the settlements were continuous over this area, and that therefore the piece of street at Κεφαλάκι must have formed part of the general system of streets in the town.

The first house to be excavated (κ on the plan) was the one running up the hill, of which the doorway and megalithic front wall were found by the first trench on the west side of the street. The part of this house not dug lies in the adjacent field, and is therefore probably too much destroyed to be worth clearing. We cleared the good entrance with two steps and a number of rooms rather larger than usual. A detached structure in the middle of the house seems to have been the foundation of a staircase, probably of wood, leading to an upper storey. That such a storey existed is shown by the discovery of a quantity of the plaster mixed with small round pebbles, of which floors were commonly made, so much broken up and confused as almost certainly to have fallen from a higher level. The rooms were disappointingly empty. A fine bronze stiletto, ·195 m. long, square in section, running down to a point at one end and at the other shaped to go into a handle, was found, with the usual rough stone implements; a pestle with a narrowed neck and mullers and hammers, and lastly a rough piece of stone with a highly polished cylindrical hollow, which suggests the idea that it is the socket in which the pivot of a door turned.

Fragments of painted pottery and vases to date the period of the desertion of this house were not lacking. Although not common, all pointed to the period of the pottery found in the pits at Zakro, that is, to

the first subdivision of the Late Minoan. A male torso with a belt in the style of the figurines from Petsofá supports this attribution, or suggests even an earlier date.

The other house dug (λ on the plan) was on the opposite side of the street. In plan it was small and simple, and, as in House κ, there were no signs of burning, and the rooms were correspondingly empty. Only one small hoard of vases was found and a few scattered objects. The vases and the fragments of pottery, as they belong to the second division of the Late Minoan, show that the house was deserted later than House κ, and at the same time as House β. Evidence for this is the following list of finds :—

1. A cup of the shape shown in *B.S.A.* ix., p. 302, Fig 1, No. 13.
2. Jugs with trefoil-shaped lips (*B.S.A.* viii., p. 309, Fig. 22, No. 7, and *B.S.A.* ix., Fig. 21, p. 322, No. 8). These are very common in all houses of this period.
3. A clay lamp. See *B.S.A.* ix., p. 326, Fig. 27, No. 1. We have learned this year that Middle Minoan clay lamps have a much more open bowl.
4. A tall 'fire-box' with a scoop above. See *B.S.A.* ix., p. 323, Fig. 23, No. 1.
5. A fragment of a very large steatite lamp. Large pieces of steatite hardly occur earlier.
6. The top of a small *bügelkanne*.
7. A bronze knife to which the handle had been attached by hammering over flanges. A knife found in the Vaphio tomb, illustrated in Ἐφ. Ἀρχ. 1889, Pl. VIII, No. 9, and Perrot and Chipiez,[1] vi., p. 977, Fig. 522, is made in the same peculiar way.

A conical plain seal of pale green stone was also found.

§ 4.—Block ε.

The region of the fifth house in this block (rooms 36–43 on the plan), only partly dug last year, has now been fully cleared. The remains were found to consist chiefly of a house destroyed by fire early in the Late Minoan II. period. This house was extremely rich in finds. It was built on the site of a Middle Minoan house, scanty remains of which were found beneath the floor, chiefly near the entrance on the main street. Lastly, a few walls at a higher level testify to the re-occupation of the site, possibly in Hellenic times.

[1] Where it is erroneously called a lance head.

The staircase by the entrance that was cleared last year (see ε 36 on Plan, *B.S.A.* ix. Pl. VI.) showed that this house had an upper storey. This year's work gave interesting evidence as to the structure of the roofs of these houses, showing that they were practically the same as the clay roofs of the modern Cretan cottages. The fire which destroyed the house had baked this clay hard and a good deal of it was found. First a lump of burned clay appeared, furrowed on one side with the marks of reeds. This was pronounced by the men to be a piece of the first layer of clay, (πηλοδόρομα or ῥόδομα) that is applied immediately to the reeds that form the ceiling. Presently a lump was found that showed markings, as if strap-shaped leaves had been mixed with the clay. These were recognized as traces of the seaweed (φύκια) that to-day is often mixed with the upper layers of clay (ἡ λεπίδα) to help to make the roof watertight.

The great quantity of pottery in this house gives good evidence of its date. It consists of:—

1. Fifteen trefoil-lipped jugs. See *B.S.A.* viii., p. 309, Fig. 22, No. 7, and *B.S.A.* ix., p. 322, Fig. 21, No. 8.
2. Two goblets with perforated bases, of the form shown in *J.H.S.* xxiii., p. 255, Fig. 23, one with the same double-axe ornament.
3. Three strainers of the form shown in *B.S.A.* viii., Fig. 22, No. 14, and *J.H.S.* xxiii., p. 255, Fig. 20.
   Another of these was found last year in the vestibule of this house.
4. Three tripod cooking-pots.
5. Three fire-boxes, one with a scoop above.
6. Eight clay scoops.
7. A pail-shaped vessel with flattened handles, like the one from the houses at Zakro, shown in *J.H.S.* xxiii., p. 255, Fig. 22.
8. Three hole-mouthed jars, with decoration in white paint.
9. A small painted askos-like vase.
10. A beaked jug of the shape shown in *B.S.A.* ix., p. 285, Fig. 5.
11. The filler shown here in Fig. 4.
12. A number of small cups with three notches or kinks on the rim, found also in the Zakro houses.
13. Several pithoi and many sherds of plain pottery.

Of these vases, 1 and 2, the trefoil-lipped jugs and the goblets, very clearly point to the period of the desertion of the Zakro houses and of Block β, a goblet with the double-axe ornament being found in all three places. Equally conclusive are the flattened handles with a boss between

them, and the orange paint and slip of the pail-shaped vase and some of the strainers. The fire-boxes and scoops point in the same direction, as does also a large steatite lamp of very massive make. At the same time the beaked jug, with its red and white paint heightening the effect of the pattern in black glaze, and its shape, which is exactly that of the vase shown in *B.S.A.* ix. p. 285, Fig. 5, as coming from the lower (*i.e.* Late Minoan I.) burned stratum in β **10**, looks earlier. It appears, however, a

FIG. 4.—FILLER FROM BLOCK ϵ. (Scale 1 : 3.)

good deal worn, as if it had been in use for some time, and in any case, it cannot weigh against the evidence for the later date given by the other vases. A small 'Palace Style' fragment also supports this. The filler, shown in Fig. 4, is quite a new shape. Like the beaked jug, it has rather

an early look. The restoration[1] of the horns of the *ἀγρίμι*, whose head is not a spout, to form a handle, is due to a suggestion of Mr. Bosanquet. Without this junction for the horns the head would merely be a useless ornament. A good many such horns in clay have been found separately, especially in Blocks *σ* and *υ*, broken at both ends, as if they had served as the handles of vases.

This house yielded also the two largest hoards of clay weights yet found. One consisted mostly of spherical pierced lumps of clay, the other of 71 roughly cubical lumps, each pierced with four parallel holes. Some of these showed a circular seal-impression of a quadruped with a spray of leaves filling the field above its back. The ear of an ox in steatite was also found, with a dowel-peg to fasten it to the head. As the ear measures ·045 m. in length, this head must have been of considerable size.

§ 5.—BLOCK *ξ*.

This large block, covering about 650 sq. m., lies to the south of Block *ε* on the slope of the hillock that overlooks the town on the south. Bounded on three sides by streets, towards the south the remains become gradually thinner, disappearing with the rise of the ground and the shallower soil. The superposition of one wall upon another, and the objects found at different levels, enable us to distinguish at least three separate strata of habitation. To begin from the top, a few finds point to houses as late as Late Minoan III. *b*, that is, to the period of the latest floor-deposits in Block *γ*.[2] Thus near the surface were found a few sherds of this style, two decorated with the arms of the degenerate octopus characteristic of this late ware, and a flat gourd-shaped vase with a ring-base and two handles, one on each side of the neck, ornamented with flowers drawn in a linear style like that of the late Mycenaean pottery of Tel-el-Amarna. A plain lentoid bead of dark steatite found near the surface belongs to this series of objects. With these we must connect the latest set of walls. These remain in sufficient quantity to form a house only in the middle of

[1] Further examination shows that the tips of the horns did not join the vase exactly as suggested in the figure, for the broken projection, drawn as the tip of the horns, is shown to have been another small handle by the presence of a similar complete handle on the opposite side of the vase. It is probable that the horns were not actually joined at the tips, as the rim shows hardly any possibility of such a junction.

[2] Cf. *B.S.A.* ix. p. 291, and p. 317, § 14.

the northern part of the block (rooms **2–7** on the key plan). Its entrance is on Street ϵ–ξ at a level some way above that of the paved roadway, from which a flight of steps, of which the bottom two remain *in situ*, led up to the threshold. Corresponding to this rise in the level is a flight of steps blocking Street ξ–π near its northern end and leading up to the threshold of a house of the same late period, remains of which are the few high-level walls found in the north-east quarter of the block (rooms ξ **20–25** on the plan).

Below this is the main mass of walls, which belong to houses deserted after a fire at the same time as Block β. A few Late Minoan III. *a* sherds occurred in the southern part of the block, where no traces of fire were found, but the greater part is proved by its contents to have been deserted, like β and the houses at Zakro, in the Late Minoan II. period. The block at this time formed five, or rather four (for the space **20–25** was certainly at this time not built upon) small houses, opening on the surrounding streets. No ashlar, except a few blocks facing Street ϵ–ξ and belonging probably to the later house, is used, just as it is absent from the contemporary Block β. With this contrast its use in γ and especially δ with their later deposits. None of the walls can be called megalithic. The houses are small and present no features of particular interest. No pillar bases were found and paved rooms were rare. Nor was much painted plaster found.

The most important finds, both in themselves and as indications of the date of the house, occurred in rooms **5** and **14**. In the latter a large bronze vase, ·55 m. high, was found lying on its side just inside the outer wall. Its shape is almost exactly that of the copper jug from the Fourth Shaft Grave at Mycenae, figured by Tsountas and Manatt, *The Mycenaean Age*, p. 72, Fig. 17, an oinochoe with one vertical handle on the shoulder and an auxiliary horizontal handle near the foot. The handle, with its three rivets attaching it to the spreading rim and its bold curve, is exactly that of the oinochoe with the strainer-mouth found last year in β **22** (*B.S.A.* ix. p. 287). The general shape of the two vessels is also similar. The part of Block ϵ dug this year yielded, amongst its mass of Late Minoan II. ware, half a large earthenware pitcher with a similar horizontal handle set low down, a necessity for conveniently pouring from these large heavy vessels.

Room **14** in the same house was full of vases, all pointing to the same

date. Round the walls on stone slabs, set in the earthen floor expressly no doubt to support their weight, were plain pithoi, and mixed up with these and quantities of charcoal and burned brick were a great number of vases, mostly plain. Twenty-eight were got out complete, all of the shapes usually found in Late Minoan II. deposits, such as those analysed by Mr. Bosanquet in *B.S.A.* ix. p. 283. Thus here were found the fire-boxes, strainers with two handles, trefoil-lipped jugs, handleless cups of the shape shown in *B.S.A.* ix. p. 302, Fig. 1, No. 13, and small cups with three notches on the rim, mentioned above as found amongst the similar vases in ε **36–43**, that are typical of such deposits. A bronze chisel-shaped tool, ·25 m. long, was found amongst these vases.

Of the Late Minoan I. period that precedes this, and is represented at Palaikastro by the earlier strata in β **10** and **13**, no floor-deposits were found, but a great many sherds in the north-east part of this block (**20–25** on the plan), which contains no Middle Minoan II. walls. We may therefore conclude that this region was not occupied by any building at this time, whilst the other houses deserted at the same time as β **1–22**, were already built, certainly as early as the Late Minoan I. period, and their débris accumulated in this open space. The sherds are many of them extremely fine, and give a lively idea of what the ware of this period must have been like. It resembles in many points the contemporary pottery from the pits at Zakro, and the tendril pattern, so abundant there, is found here also quite frequently.[1] The style is already characterized by the prevalence of dark-on-light decoration, but retains from Middle Minoan times the free use of white paint. Red also is often added in stripes to the dark-on-light design, usually the friable red of the 'Kamáres' technique, but occasionally a red variety of the black glaze-paint. These sherds with red paint seem earlier than the others, and possibly represent the Middle Minoan III. period, the latest stage of the polychrome Middle Minoan style. The 'ripple' or 'wood-pattern' so common in the Zakro pits is abundant. Of the splendid effect of these vases when complete, we get some idea from the lower part of a big vase from this area, decorated with the 'ripple' pattern and a bold design of leaves and stalks in reddish glaze-paint upon a fine orange slip. Still more gorgeous are the remains of a strainer of this style, found in a trial trench east of Block δ. Only the lower part is preserved, but when complete it must have been

[1] See *J.H.S.* xxiii. p. 249, Figs. 1 and 3.

the largest of its class yet found at Palaikastro. It is covered with an orange slip, decorated immediately above the waist with a band of tendril pattern in reddish-brown glaze. Above this is a dark band bearing a twig-pattern in white paint. Between this and the break is a band of spirals each with a large eye relieved by a cluster of white dots. This last is a very characteristic pattern.

The next stage lower down both of walls and pottery is represented by certain floor-deposits belonging to the walls at the lowest level, which are thus proved to belong to Middle Minoan houses. Of these the most important is the hoard of vases found in the north-east area of the block, between **ξ 20** and **ξ 1**, a deposit which tells us much that is new about Middle Minoan II. pottery. These vases were all found close together, and for the most part fairly complete. Though no wall quite close by could be said to belong to them, their character clearly associates them with the other Middle Minoan deposits found beneath the later floors in this block, and in connexion with the earliest walls. Forty-eight vases were got out complete, falling into the following groups :—

I. Ten cups of the 'Vaphio' type, generally covered with a poor black glaze; cf. *B.S.A.* ix., p. 302, Fig. 1, Nos. 11 and 11*a*. Four cups of the shape shown in *B.S.A.* ix., p. 302, Fig. 1, No. 10. Nine handleless cups of the same shape.

These are thus vases that are identical with those of Class B of last year's report (p. 304), *i.e.* vases of poor 'Kamáres' technique, and assigned there to a later period than the good vases from the cemeteries. The presence here of these vases shows that we have to deal with a late 'Kamáres' deposit.

II. Certain vases of various shapes resembling those found in the cemeteries. Amongst these are a small bucket-shaped cup (cf. *B.S.A.* viii, p. 293, Fig. 7, vase on left of the bottom row), a three-handled jar, some small bowls supported by three legs, etc. These are of no great importance, but have mostly been found elsewhere in similar deposits.

III. Four very fine vases which are of great importance in determining the character of the pottery of this period.

(*a*) A cup of the 'Vaphio' shape, of delicate fabric, ·07 m high, with a pale slip, decorated round the body with a belt of black stripes, and the rest of the body covered with the 'ripple' pattern in vertical lines. This pattern also ornaments the flat handles, and covers the bottom of the cup with radial stripes

(*b*) A small bowl ·14 m. in diameter, covered inside and out with a marbled decoration of brown paint, grained by the brush into zigzag waves. The lip is covered with the 'ripple' pattern.

(*c*) A similar bowl, ·15 m. in diameter, with the same decoration, except that the marbling covers the lip also.

(*d*) A basin, diameter ·135 m., height ·65 m., covered with similar brown

paint grained in horizontal lines. A similar, but later, mug was found in the Zakro pit. The style of these last three vases is quite new at Palaikastro. With them falls a fragment of a much larger bowl (diameter about ·28 m.) of the same stout ware found in a Middle Minoan deposit this year in δ **48**. The decoration consisted of 'ripple' pattern on the lip, and on the rest of the bowl zigzag marbled paint interrupted by concentric bands of solid colour. A saucer of the same style came from the Megaron of the older house in Block δ; it was found in digging beneath the Late Minoan pavement.

(*e*) A bowl, of which no more than half could be recovered, of very fine eggshell ware. The reddish clay is extraordinarily pure, and the surface, covered with a thin coat of brownish-black glaze, delicately smooth and regular. The uniform thickness of the walls of the bowl is about that of the shell of an ostrich egg. The decoration, unfortunately much perished, consists of a delicate pattern of white wavy lines, centering about the base of the bowl, and circles of white dots. The shape is exactly that of the eggshell bowls from Knossos, of which one is shown in *J.H.S.* xxiii., Pl. V., No. 1, a vase of the finest polychrome style. The polychrome decoration of these similar Knossian bowls brings this whole deposit into connexion with the finest polychrome Middle Minoan ware, with the full range of colours, red, yellow and white, and with designs already becoming naturalistic. Of this style a bowl was found in Block δ this year with a pattern of large white rosettes with a red centre on the black ground, connected by bands of orange-yellow, and with the interspaces filled by crocuses in white.

This deposit thus shows that, instead of the finest ware of the Cemeteries being followed by a Second Middle Minoan period of decadence, a continual progress introduced more colours, a more delicate technique and freer designs. That this ware is a step towards the Late Minoan I. style is indicated by the use of the 'ripple' pattern and the appearance on elegant vessels of the dark-on-light style, a few other examples[1] of which were found under the floors in this block, and so are hardly later than this deposit. Lastly it contained a fragment of a bowl of the same shape as those so common in the pits at Zakro, with the handle bearing the characteristic clay 'rivet' at the top.

Several other floor deposits were found belonging to the Middle Minoan walls. Of these the earliest in character was that in room **9** in the North-West corner of the block. It comprised cups like those of the earlier 'Class A' ware from the ossuaries, a clay lamp with the very open bowl noted above as an early characteristic, and two headless female figurines with bell-skirts of the kind found at Petsofá.

These deposits carry us back as far probably as any of the walls in this block. Even earlier habitation is indicated by the discovery at the lowest

[1] *E.g.* a cup with horizontal bands and a neat twig-pattern in dark paint with touches of white on the rim was found below the north wall of Room **2**.

levels of a few hand-made sherds of grey clay incised with dots and curvilinear designs, of a kind occasionally found in the ossuaries.

§ 6.—BLOCK π.

South-east of the part of this block now excavated, the ground falls away rapidly in a terraced slope, and all remains seem to have disappeared. In this direction a limit, or at all events a break, in the continuity of the town has been reached.

Of the first house all that is left is a row of rooms on the East side of Street ξ—π. These rooms go down to a considerable depth, and the remains in them are of the Late Minoan I period, although traces of floor levels some way up the walls show that they formed part of a house occupied at a later date. Above them at the north end of the row is a room at a higher level, probably belonging to the latest period of the town when the rise in level had led to the building of the steps that block the street just north of this point. Its only notable yield was a curious male figurine,[1] ·185 m. high, of red clay covered with a red coating. The shoulders are extravagantly broad, measuring across half the height of the figure. The dress consists of a double leaf-shaped apron that falls from the belt before and behind. The hair is elaborately dressed with three flat curls on the crown, and three long tresses, one falling down the back, and one on each side over the breast. This arrangement is notable, as it exactly reproduces the hair of one of the men of Keftiu in the Rekhmara tomb at Thebes, shown on the Frontispiece of H. R. Hall's *Oldest Civilization of Greece*. Another Keftiu man (*B.S.A.* ix. p. 171, Fig. 2) shows the row of three curls.

The lower level rooms yielded a good many objects, but the most interesting was the lower part of a cup, cut out of rock crystal. This was very clearly in a Late Minoan I stratum. It was a straight-sided, flat-bottomed, round mug, ·06 m. in diameter, with the walls about ·008 m. thick. The bottom of a similar cup of about the same size, but more highly polished, came from Block χ. When complete these cups probably had metal handles.[2]

Separate from these rooms are the two houses **7–16** and **17–22**, built above the scanty remains of a Middle Minoan house, of which a trace

[1] The figure may be earlier than the walls, as it was found near their foundation, and may belong to the Late Minoan II period.

[2] Stone vases found at Knossos possess attachments for such handles, *B.S.A.* vi. p. 31.

is left in a deposit of vases found below the later walls in π **17**. These houses are shown by their floor-deposits to have been deserted early in the Late Minoan III period, and below their walls another set can be made out belonging to earlier Late Minoan II houses, from which a few vases, clearly distinct in character from the later floor-deposits, were recovered. The shortness of these Late Minoan periods is well shown here, as the later walls follow pretty closely the lines of the earlier, and it is not easy to disentangle them, whilst the Middle Minoan walls seem to have no connexion with what lies above them.[1] This holds good in most parts of the town where Middle Minoan walls have been found. The later houses were entered from the North from Street o–π. At the earlier period there was an entrance on the western side, but this went out of use, for the entrance hall opening on the Street ξ-π was found packed with Late Minoan II vases. Most of the usual forms found in ξ **14**, β **1–22** and the Zakro houses were found. Amongst them were three double vases of the form shown in *J.H.S.* xxiii. p. 256, Fig. 26, from Zakro, which had not occurred before at Palaikastro. This room was destroyed by a fire, no doubt the same that destroyed the houses in ξ, and left the similar burned deposit in ξ **14**.

The objects found in the latest rooms clearly belong to the period of the pottery found in the filled-up bathroom. Besides the characteristic spouted bowls (*B.S.A.* ix. p. 315, Fig. 14, No. 2), two conical fillers shown in Fig. 5 were found. Room **9** yielded three large *pithoi*, two of them painted, and of a marked barrel-like shape, with wide mouth and rim adapted to receive a lid. From room **18** came a magnificent painted bath, covered with a bold floral pattern, in style recalling strongly the vases of an earlier period, and markedly the λάρναξ shown in *B.S.A.* viii. Pl. XVIII, XIX. The resemblance to the big flowers of panel *c* of the λάρναξ is very clear, and the birds on the filler here shown (Fig. 5, *a*) recall also the bird on panel *d*, and in general this pottery from Block π is early of its kind.

Another find, with the same associations, was a plaque of rock crystal, broken on one side, from room **9**. By comparing this with Late Mycenaean sword-hilts, it is plain that it was part of one of a pair, which were fastened to the hilt of a sword to form the grip. On the underneath

[1] This agrees with Dr. Evans' supposition of a great catastrophe at Knossos during the 'mature polychrome' or M. M. II. period. See p. 16 of this volume.

and unpolished side is a groove, clearly to accommodate the central rib of the blade; the part of the plaque away from the blade is missing. The upper surface has a dull smooth surface, more beautiful than the transparency of glass, and is worked into four longitudinal, slightly concave faces. A gold-mounted sword with a hilt of very much the same shape

FIG. 5.—FILLERS FROM BLOCK π. (Scale 1 : 3.)

was found in a contemporary tomb at Mouliana[1] in East Crete by Mr. Xanthoudides, and weapons with hilts of precisely this shape but of other materials have now been found in similar surroundings at Knossos.

§ 7.—BLOCKS ς AND υ.

On the hillock to the south of the town a preliminary trial had brought to light a fine vase, and the commanding nature of this part of the site made it a likely position for a fine house. So, notwithstanding the shallowness of the soil as revealed by trial-pits, an area of some 600

[1] Ἐφ. Ἀρχ. 1904, p. 30.

sq. m. (Blocks ς and υ on the plan) was cleared on the highest part of the knoll. The work was well repaid by the discovery of the two exquisitely carved ivory statuettes of boys, which are to be published later, but apart from these nothing of great importance was found. The houses were small and poor, with no marked architectural features, except that one of the rooms had two, and originally no doubt four, pillar bases forming a square, like the houses in β, γ and δ (cf. general plan *B.S.A.* ix. Pl. VI.). Evidence of continued habitation, in the shape of deposits and walls at different levels, lasting all through Late Minoan times, excepting the latest period, was found. The two blocks uncovered lie on opposite sides of a crooked street, that must have once joined the town street ξ–γ. Now, owing to the extreme shallowness of the soil, the entire length of the street cannot be traced, and the cobble pavement gives out just south of these houses.

The most interesting finds were in a room (5) in Block ς, belonging to the house at the highest level. It yielded a curious collection of stone objects. These were a stone lamp, a stone weight, a fragment of lead, two beads, one of black stone and the other of much decayed glass, a worked fragment of liparite, a small breccia celt, an engraved cylinder and one half of a small steatite mould. This is the first breccia celt that has been found here. Celts of haematite and of a kind of green stone are frequently found by the peasants, and this year several have turned up in the houses. The green ones have come, I believe without exception, from the upland villages of Magazá and Karýdhi. The cylinder is of dark stone, ·012 long, engraved with a tree faced by two standing swans, between whom stands a female figure with bird's head and outstretched wings. Two unknown objects fill up the design. The mould is of extremely soft stone, and doubtless for making the glass paste ornaments, of which such an abundance have been found in Mycenaean tombs on the mainland, and in the contemporary tombs at Kalývia near Phaistos. The number of beads of this material found this year in the *larnax* burials on the cliff fits in well with these connexions. The present object would make a pendant of the same design as the gold ornament from Mycenae, figured by Perrot and Chipiez, vi. p. 546, Fig. 224, the ivory from Spata, Fig. 223, and the fresco fragment from Tiryns, Fig. 222. That it was a mould and not a form for shaping gold leaf, is shown by its being pierced with holes for dowelling on the other half of the mould, and grooves for cords to securely tie the two

together. The stone is also too soft to have been used as a form. This object, like the crystal sword-hilt from π, is important as helping to link these late town-deposits with other finds, and to fix their place in the general series.

§ 8.—BLOCK δ, AND THE SHRINE OF THE SNAKE GODDESS.

A good deal of work was done on this block in this year's campaign. Our main objects were to work out the stratification of walls in the regions uncovered last year, to clear certain rooms still undug, and to find the limits of the block to the south and east. The general result was to show that whilst the block at its latest period consisted of the large mansion shown on the key-plan, the garden and court connected with it, and two smaller houses, yet abundant remains of earlier houses exist, especially in the eastern and northern regions. The open space **18**, **19**, especially covered the Megaron of the earlier house, with its four pillar-bases standing round the hearth, as in the contemporary house in Block β. The Early Minoan discoveries that this work led to in room **32** have been described above. The western limit of the block was found to be a street on which the Palace wall abutted. The southern limit is not yet cleared up. The street that runs west from Street γ-δ has been traced no further than square 6 F ; west of this, that is in square 6 E, the Palace abuts immediately on houses of a much earlier date.

The clearing of the rooms **43** to **48**, which last year were only dug to the level of the top of the walls, led to important results. The depth of earth was very considerable, and the rooms were well furnished with objects of interest. The first point that was cleared up was the date of the different buildings in the block. The great quantity of Late Minoan III pottery found in these rooms, which are a part of the great Palace fronting on Street δ-μ, gives a date for this edifice, and shows that it was deserted at the same time as Block π.

Below these Late Minoan III. *a* vases in these rooms were found great quantities of pottery going back well into the Middle Minoan period. This deposit was partly dug last year—it presented nothing new excepting the fine bowl with marbled paint discussed above, in connexion with the Middle Minoan deposit in ξ **20**. Together with the other deposits found at low levels, it enables us to sum up the history of the block

somewhat as follows. Inhabited, as δ **32** shows, from the earliest Minoan times, it was continuously occupied, as we may infer from the absence of floor deposits, until the great period of desertion when β **1–22** were finally abandoned. At this time the fillers found last year were left. Unlike Block β, however, its desertion was not final, and it was rebuilt on a magnificent scale. This later building is the Palace as we now have it.

To this Palace, room **47** is a back entrance, and **43–46**, and **48**, store-rooms. Last year **45** yielded six large pear-shaped pseudamphorae, before digging was abandoned. This year the interest centres round room **44**. This yielded first some fine vases of the same style as those from the

FIG. 6.—RITUAL OBJECTS FROM BLOCK δ. (Scale 1 : 4.)

filled-up bathroom in Block γ, a style classed in the section on nomenclature above as Late Minoan III *a*; these will be discussed below with the similar pottery from Block π and the λάρναξ burials from the cliff. Secondly, a number of clay objects connected with the Minoan cult of a Snake-Goddess were found. These consisted of:

I. Four female figures (Fig. 6), in long skirts, ·12 to ·13 m. high. Of these, three have their arms, which are in all cases broken, outstretched, whilst the fourth holds in her arms a striped snake. This enables us to recognize the Cretan Snake-Goddess, found already at Knossos, Gourniá and Priniás, attended by three votaries. All four figures are covered with a pale yellow powdery slip and the dress and features rendered in reddish-brown paint. Like the Petsofá figures they were

made in two parts, the upper half ending below in a peg which was inserted into the top of the skirt-piece. Their dress is of the same bodice-and-skirt type as that of the Petsofá figures, and consists of a jacket with short sleeves, open in front down to the waist, but, unlike that of the women from Petsofá, covering the breasts. Of the high collar at the back there is no trace. Except for a stripe running from the arms down the side to the belt, the Goddess' bodice is plain, but those of the Votaries are more elaborate. They seem finished off round the neck behind with a band of openwork, whilst the back is decorated with vertical waved stripes, that recall the four stripes down the back of the Knossian Votary shown in *B.S.A.* ix., p. 79, Fig. 57. The waist is confined with a broad belt. The skirts reach to the feet, with reserved panels, possibly of another fabric, and horizontal stripes above representing embroidery. The scheme of decoration is that of the votive robes found in the Temple Repository at Knossos (*B.S.A.* ix., p. 82, Fig. 58), except that the horizontal stripes are absent from the Goddess' robe, and the panels are left plain in all cases. The skirts have not the full bell-shape of the Petsofá figures, but just below the waist project rather suddenly and then fall sharply. This indicates that they were kept distended by a horizontal hoop, after the manner of a crinoline. The roughly contemporary figures from the Shrine of the Double Axe at Knossos,[1] and also those from Gourniá and Priniás, have skirts of the same shape, with the hoop, however, so wide and high as to make the upper part of the body seem to rise from a clay cylinder. These Palaikastro figures, with their less pronounced but unmistakable crinolines, make it likely that these cylinders are not as Dr. Evans has suggested, a survival of an original columnar form of the goddess, but represent an exaggerated crinoline or farthingale, stiffly stretched over a hoop. Besides this top hoop there was no doubt another at the hem, and the slightly incurved sides of some of these cylinders, which is shared by the skirts of these new figures, strongly suggest the incurving of a skirt tightly stretched over a pair of hoops. It may further be remarked in favour of this view, that, if these cylindrical bases were a reminiscence of the form of the earlier sacred "baetylic" stone, they would be appropriate only to the figure of the Goddess herself, whereas at Knossos the Votary as well as the Goddess is shaped in this way. The figures have no head-gear, and their hair is dressed

[1] *B.S.A.* viii. p. 99, Fig. 56.

in a single long tress coiled into a knot at the back of the head. There were also three odd arms of other such figures, with the hands complete. They cannot have belonged to the figures found. Finally, a female head and bust were found, originally perhaps painted, but now much worn. The hair is dressed in the same way, but the hands, as often with similar figures, are held to the breasts.

These female figures stood on some sort of clay support, as may be seen from the roughness of their bases. Further, the three with outstretched arms stood on the edge of this support, facing inwards, because their skirts just at the back are pinched over to grip the edge of the probably circular base. The skirt of the woman with the snake has no such projection, and where she stood the support spread out on all sides. Further, the hands of two of the other figures show a break which joins, and when this is done the two figures in question stand facing inwards at right angles to one another, and forming the half of a hand-in-hand ring that, if complete, would have comprised four dancers. The third woman may be taken to fill one more place. Thus we can reconstruct a group consisting of the figure with the snakes in the middle, and round her hand-in-hand three women dancing. It is in fact a group showing how the Minoan Snake-Goddess was worshipped by a ring of dancing votaries. Is the group to be completed by a fourth votary? That she is missing from the find proves nothing, for we have the three odd arms and the broken bust, nor has any trace of the support of the figures been found. But it seems likely that there were only three, for a fourth would have prevented the goddess herself from being seen so clearly. It seems quite possible that the place of a fourth votary was filled by the painted bird shown in Fig. 6 *f* which seems to have been broken off the kind of stand on which the figures must have stood. Also the Cretan 'ring-dance,' in modern days at all events, demands a gap that the leader may have one free side to perform the proper steps. The figures in the reconstructed group come suitably close together and would stand upon a base about ·16 m. in diameter.

II. The clay doves shown on the top row of Fig. 6, one of which it has been suggested was perhaps mounted with the figure of the Goddess. Of the remainder, *b* is painted like the figures, and the rest are plain. All the three smaller ones have been broken off some support.

The three larger doves, whose greatest dimension is ·105 m., are of greater interest. They are all three just alike, and are of plain unpainted clay. Each has a deep hole pierced on the under surface, showing that they were pegged to some support. As to what this support was we are not without a clue. In the Sanctuary of the Dove Goddess at Knossos a trinity of sacred pillars was found surmounted by three doves (*B.S.A.* viii. p. 29, Fig. 14), indicating the descent of the celestial influence upon the fetish form of the deity. Considering that they were found amongst religious objects, it might be plausibly suggested that these doves also originally belonged to such a set of pillars and were removed from them when the contents of the shrine were packed away where we found them. If, however, we consider their actual posture this theory is greatly strengthened. The doves are neither flying nor quietly sitting ; their tails are still spread as if in flight, whilst their wings are neither extended for flying nor fully closed for rest. They are shown with great skill in the act of being furled after a flight ; in another moment they would have dropped into their position of rest. We see the birds thus at the moment of perching after a flight. Three doves in this position, found with the furniture of a shrine, can hardly be other than the sacred doves descending upon such a trinity of pillars as was found at Knossos, it may be in response to some prayer in the ritual that the deity would draw near.

III. The remains of forty-four rough conical-shaped cups, about ·07 m. in diameter, of which some twenty are almost complete. They have all been broken off some flat-topped linear support, to which they were originally fastened. Most of them also have two or more, rarely one, projections or scars just inside the lip, showing that from these also something has been broken away. Two of them are roughly coloured with the same paint as the female figures. One side of all the others is smeared with a reddish slip. The only object found that could have supported these cups is a fragment of the edge of a bowl, perhaps some ·20 m. in diameter, daubed with the same slip, and having had something at one point broken away from its lip, which is just the width required to fit the scars on the bottom of the cups. Although no one of these actually fits the scar on the lip of this fragment, it is fair to assume that these little cups were once fastened round the edges of this and other bowls. Apparently the bowl in question could take about five or six cups on its rim. The scars on the lips of the

cups must have been left by handles that connected them above, like the double cups from Knossos, shown in *B.S.A.* vii. p. 85, Fig. 26. This conjectural arrangement is supported in all but three cases by the direction of the support as indicated by the scars beneath and by the position of the scars on the lips of the cups, for these latter are not directly opposite to one another in a line with the scar on the bottom, but each a little off, but on the same side of, the straight line passing through the scar, showing thus that the support was curved and not straight. This circumstance also tells us which side of the cups faced outwards, and the reconstruction is confirmed by the observation that in all cases this is the painted side of the cup. The result we get is a kind of *Kernos*, put together and roughly daubed with paint all round the outside. The cups that do not fit this arrangement, amongst which are two or three that show scars on the outside of the sides, must have belonged to some other complex of cups, of which several varieties have been found in Crete.

To be connected with these *Kernoi* is another object from this room, shown in Fig. 7, *a*. It is a clay cover with a conical pierced top, and a kind of door in the side, decorated with a frieze of birds. Similar, and probably contemporary, objects of plain clay were found at Phylakopi (*Excavations at Phylakopi*, p. 210 and Pl. XXXV. 7), and the suggestion made that they served as covers for lamps, the handle protruding through the hole in the side. That lamps were set on *Kernoi*, when they were decked for ritual use, is stated by the scholiast on the *Alexipharmaka* of Nikander, v. 217 :—*κέρνους γάρ φασι τοὺς μυστικοὺς κρατῆρας, ἐφ' ὧν λύχνους τιθέασι.* It is thus likely that this cover was used to shelter a lamp placed in the bowl of one of the accompanying *Kernoi*. This is supported by evidence from Eleusis, where, with the numerous *Kernoi*, certain perforated covers were found, which Rubensohn (*Mittheilungen*, xxiii. p. 271) was led by this gloss to regard as covers for a lamp carried in the bowl of the *Kernos*, either alone, or on the top of the votive cake (*παλάθιον*).[1] Rubensohn further adduces two leaden Athenian theatre-tickets ornamented with *Kernoi* on the tops of which are seen what are probably candles. That offerings of food should be decorated with

[1] These Eleusinian covers, one of which is figured in *Mitth.* xxiii. p. 303, are dome-like or flatly conical and without a side-opening, as the *Kernos* is itself deep enough to hold the lamp, and not shallow and dish-like as, from the actual example mentioned just below, we see that it probably was in Crete.

lights will not strike anyone as strange, who has seen in Cretan churches the dishes of sweetmeats eaten in remembrance of the dead, each with its taper planted in the middle of the mound of boiled grains. Two classical examples also are quoted by Rubensohn.[1]

All these suggestions fall into line with a piece of direct evidence which I owe to Dr. Joseph Hatzidakis, Senior Ephor of the Museum at Candia. He showed me in the Candia Museum an unpublished *Kernos* of much later date, identical with the one reconstructed above, except that the cups, which are nine in number set round the edge of a shallow bowl with a foot and two horizontal handles, are not connected above in any way. It was found in Crete, and resting inside it was a clay lamp, a striking confirmation of the scholiast. In the face of this it can hardly be doubted that the Palaikastro *Kernoi* also held lamps, sheltered by such perforated covers as that shown in the figure, and that Rubensohn's conjecture as to the use of the Eleusinian covers is correct. As *Kernoi* were carried on the head in processions some shelter for the flame would be quite necessary.

The presence of *Kernoi* helps us to identify the goddess of the shrine. The scholiast on Nikander quoted above is explaining the words *Κερνοφόρος ζάκορος βωμίστρια Ῥείης*, and other evidence is collected by Rubensohn to show that, besides at Eleusis, the *Kernos* was used in the closely allied cult[2] of the Mother of the Gods, Rhea or Cybele. It seems confined to these cults of a Mother Goddess. The worship of such a Goddess in Minoan Crete is now well established, and could nowhere be more appropriate than at Palaikastro, where the Hellenic temple that in later times carried on the religious tradition of the place, was sacred to the young Zeus, the son of Rhea. That in the continuous local worship of the divine pair, Rhea and Zeus, the predominance should pass from the female to the male divinity with the passage from Minoan to Hellenic religious ideas, is strikingly in accord with the general prominence of female deities in Minoan Crete.

The altar hill of Praesos can now be recognized as another shrine of this Goddess. The prominent place of lions among the votive offerings,

[1] The Palace of Phaistos also has yielded an object which can be regarded as such a cover for a *Kernos*, rather than as a model of a hut (*Mon. Ant.* xii. p. 128, Fig. 55). It was found not far from the altar-like structure in the western part of the Palace, and was recognized by Pernier as of 'significato e destinazione puramente sacrale.'

[2] See J. E. Harrison, *Prolegomena to the Study of Greek Religion*, p. 158.

and the antefix with the design of a woman bearing a snake in either hand noticed as clues by Mr. Bosanquet in his report on Praesos (*B.S.A.* viii. p. 257), taken in connexion with the seal-impression from Knossos (*B.S.A.* vii. p. 29, Fig. 9) showing a Goddess, called by Mr. Evans the prototype of the later Cybele and Rhea, on a lion-guarded peak, show that at the Eteocretan capital, as well as at Palaikastro, the cult of this Goddess lasted on into Hellenic times. Her connexion with the lion is clearly another point in her classical tradition inherited from pre-Hellenic religion.

All these objects were clearly broken and then put away in this room where we found them. For though every fragment dug from this place was carefully examined, no more traces were found of the supports from which these objects were broken. The vases found with them in the same way lacked a good many pieces. However this came about, whether in consequence of some sudden alarm that caused the hasty spoliation and removal to a place of safety of all the smaller objects, or for some other reason, we have here objects of the first importance for the study of Minoan religion. This group, with its ring of dancing Votaresses, surrounding their Goddess with her Sacred Snake, presents us at Palaikastro with the same cult as that with which at Knossos, at an earlier period, the porcelain figures of the Snake-Goddess and her Devotees were connected. In discussing this Snake-Goddess (*B.S.A.* ix. p. 87), Mr. Evans preferred to regard her, not as a *σύμβωμος*, but as a chthonic aspect of the Goddess of the Doves, though only on a seal-impression was any trace of the dove found with her. This Palaikastro find now gives a very strong support to his view, for we have what is clearly the same Snake-Goddess accompanied with figures of doves, worshipped, that is, under both her aspects. If it is correct to suppose that the three larger figures of doves with half-spread wings were actually perching upon a trinity of sacred pillars, as they are shown in the early Shrine of the Dove-Goddess discovered at Knossos in 1902 (see *B.S.A.* viii. p. 28, Fig. 14), in no more striking way could the dual, celestial and infernal, nature of the Goddess be exhibited, whilst the *Kernos* of the Mother-Goddesses, Rhea and Demeter, emphasises her character as the Great Mother.

Of no less interest is the illustration afforded of the ritual dance with which this goddess was worshipped. The previously known archaeological evidence is noticed by Mr. Evans in his discussion of the Theatral Area at

Knossos (*B.S.A.* ix. p. 110). We now know that this dance was a ring dance, not differing apparently from the modern Cretan χορός.

A fragment of a clay base with three pairs of feet on it from Petsofá suggested to Mr. Myres last year (*B.S.A.* ix. p. 362, Pl. X. 13) a square ring-dance, such as are found in Cyprus. This carries back the Cretan practice to Middle Minoan times, whilst a ring bearing alternately figures and vases, a combination of *Kernos* and dance, from the very late Mycenaean cemetery of Koúrtes, brings such objects down almost to the archaic Hellenic period.

With these cult objects a good deal of pottery was found, mostly much broken. It was all of the late style found last year in the filled up bath-room in Block γ, classed a Late Minoan III *a*. The most important pieces were as follows :—

I. Two circular lids with a handle in the middle, of which one is shown in Fig. 7, *b*. It is decorated with birds and flowers, the latter especially drawn in a

a *b*

FIG. 7.—POTTERY FROM THE ROOM OF THE RITUAL OBJECTS. (Scale 1 : 4, about.)

linear style that recalls the pottery of Tel-el-Amarna and its congeners. A painted fragment bears a flower of still later style.

II. A fine double vase, consisting of two round open jars connected by an arched handle. It was painted with a scale pattern, worked with wavy parallel lines.

III. The tops of two very small *bügelkannen*. In the adjacent room last year, some large *bügelkannen* were found.

IV. A number of broken bowls, exactly similar to those found in the bath-room of Block γ and shown in *B.S.A.* ix., p. 315, Fig. 14, No. 2. These bowls are the commonest characteristic product of this style.

As belonging to the same period it is convenient here to say something of the pottery found in the latest deposits in Block π and that associated with the *larnax*-burials on the cliff. The fillers, bath, barrel-shaped pithoi and bowls of characteristic shape and decoration from π have been mentioned above. From the burials on the cliffs came sixteen vases practically complete, besides the *larnakes* themselves. We have thus now a considerable mass of pottery from which to illustrate this style.

Three of the vases from these burials are shown in Fig. 8. Of these

FIG. 8.—VASES FROM THE LARNAX-BURIALS. (Scale 1 : 3.)

a is a waisted strainer of a form that goes back to the Late Minoan I. but is particularly frequent in Late Minoan II. deposits. The flat *bügelkanne* (*b*) recalls one found in 1901 in the Beehive tomb (see *B.S.A.* viii. p. 303, Fig. 19). The third vase (*c*) is a cylindrical pyxis, characteristic both in shape and decoration. Its rim is shaped to receive a lid. Another similar pyxis was found with two upright handles set on the rim. The cylindrical vessels

recall the peculiar barrel-shape of pithoi of this period, which are also made to receive a lid. One of the finds here was a pyxis with its lid complete. To this list of shapes we may add the gourd vases and stalked kylix found last year, *bügelkannen* of all the two-handled forms, and the shapes shown in *B.S.A.* p. 327, Fig. 28. These vases are generally covered with a rather pale yellowish slip, that is sometimes rather friable. The paint is a good black or reddish glaze; white paint does not seem to be used. The clay is generally fine and well baked, giving a clean sharp break. The character of the decoration was described last year. Its closely set conventional rows of leaves and scale patterns and spaces filled with parallel lines are a formalised version of the preceding style, which, as in the vases from π, is often directly recalled. The birds are very characteristic. The general impression given is that industry and technical skill had outlived artistic inspiration. These vases represent the Cretan style that was contemporary with the culture represented by the Beehive tombs at Mycenae, the Ialysus cemetery, and in general the bulk of Mycenaean ware from the Greek mainland. This is established by the identity of many of the objects found. The forms of swords are the same. The glass paste beads and ornaments, so common in such Mycenaean tombs as that at Spata in Attica, are found in these *larnax* burials at Palaikastro, and above all among these very characteristic vases are found examples of the linear style that marks mainland ware. The tendency is very clear in the flowers on the cover shown in Fig. 7, *b*, and one or two vases have been found that look almost like importations from some place where the linear style was native. That Crete should develop a style of its own at this time, when the rest of the Aegean world was filled with another and remarkably homogeneous class of Mycenaean pottery, indicates that the centre of culture had now left Crete for ever. None of this ware has been found in Egypt; it would seem that the peaceful culture of the Keftiu was being overwhelmed by the piratical hordes of the 'Peoples of the Sea,' who troubled Egypt in the period following the XVIIIth Dynasty.

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EXCAVATIONS AT PALAIKASTRO. III.

§ 9.—The Larnax Burials.

In 1904 trial-pits on the cliffs brought to light a group of *larnax*-burials not far from the one that was found in 1902 and is described in *B.S.A.* viii. p. 302, and Fig. 17, p. 302. The indications visible were, as then, pieces of limestone set in line. In several cases the burials were found at the bottom of shallow pits, but in the largest group (5–8 on the plan given in Fig. 9) the *larnakes* had been thrust under a projecting ledge of conglomerate in a hole scooped out to receive them, and the whole covered up with earth.

The *larnakes*, which were solidly built up of clay, are of two types. The first, referred to in this report as tub-*larnax*, is an oval trough, shaped like a foot-bath with the longer sides somewhat pinched together, and the second, the chest-*larnax*, is a square-cornered coffer with panelled sides standing on four short feet, like the *larnax* shewn in *B.S.A.* viii. p. 298. No trace of lids was found.

No. 1 on the plan is an isolated tub-*larnax* some ten metres south-west of the next group, which consists of four *larnakes* as follows.

Two paces west of No. 2 was found a tub-*larnax*, not shewn on the plan, that lay at the bottom of a pit, tucked in against a large boulder of conglomerate. It was found lying on its side, and broken across the middle. In it were a few bones, crushed and scattered, and a small plain cup, and by the side of it another similar cup and a pear-shaped *bügelkanne*.

Nearer the cliff were found three tub-*larnakes* (Nos. 2, 3, and 4), with their long axes approximately in a straight line. In lines at right angles to these were placed rough pieces of limestone, foreign to the natural

formation of the cliff. No. 3 was surrounded by fragments of others, built round its margin so as to protect it from the pressure of the earth. It measured internally ·93 m. in length, ·46 m. in width, and ·44 m. in depth. No. 4 was slightly smaller, being ·76 m. long, ·36 m. wide, and ·42 m. deep. Each of these three burials contained the bones of one or more persons, the skulls being always at the south end of the *larnax*, and the long bones laid parallel to one another. No. 3 had three skulls, piled up on a heap of

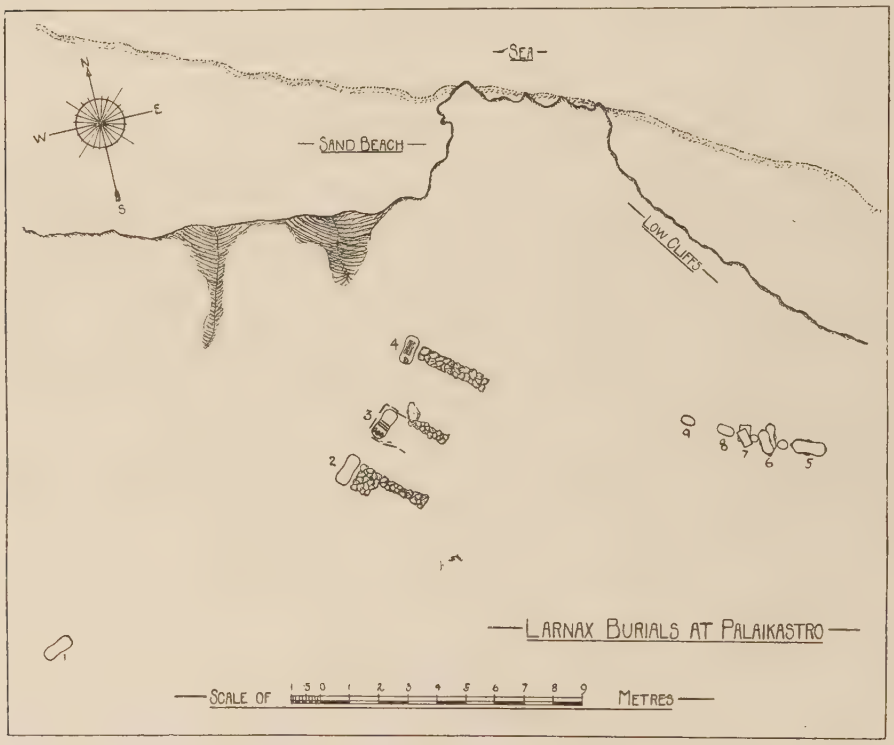

FIG. 9.—PLAN, SHOWING POSITION OF THE LARNAKES.

bones laid across the floor of the *larnax* (see Fig. 10). A similar arrangement was noted in the much older Middle Minoan cemeteries explored in 1902.[1] At the opposite end of the *larnax* to that where the skulls lay, a jawbone was found. This, together with the arrangement of the skulls

[1] See *Man*, 1902, 119, 'Sometimes the principal bones were formed into a kind of bed, on which several skulls were laid,' and *B.S.A.* viii. p. 292, Fig. 6.

and bones described above, clearly points to the same custom of re-interment as was noted in the Middle Minoan ossuaries, where the skulls, though otherwise well preserved, commonly lacked the jawbone. On the top of this same *larnax* lay the strainer shewn in Fig. 8, *a*, and by the edge of it a small flat *bügelkanne* (Fig. 8, *b*). Just in front of the skulls lay a bronze mirror, ·135 m. in diameter. The strainer, in appearance the earliest vase found here, probably belongs to an earlier interment, represented by the *larnax*-fragments built round the rim. Some of these fragments are painted with a bold papyrus-like design.

FIG. 10.—LARNAX 3, CONTAINING THREE SKULLS.

The last group of burials was some ten metres further east along the cliff. An oblong pit had been dug, and the soft rock taken out from under a ledge of conglomerate. The burials were just underneath this ledge. Beginning from the east, No. 5 was a tub-*larnax* (Fig. 11), with its axis parallel to the line of the ledge. It contained very scanty remains of bones and a miniature *bügelkanne*. Quite close to it lay a large cylindrical painted

jar with a closely fitting lid. In it were found a bronze razor, a tool like those used at the present day for cutting leather, a long bent pin, and a number of glass-paste beads. With these were some teeth and small fragments of bone, but no burned earth. Beside it was a middle-sized *bügelkanne*, and near by two beautifully carved ivory objects were found, that seem to have been the ends of sceptres. Ivory work, as may be seen from the contemporary Mycenaean bowls on the mainland, is characteristic of this period. Almost touching this jar and at right angles to the line of the ledge were

FIG. 11.—LARNAKES 5 (ON RIGHT) TO 9 (ON LEFT).

two tub-*larnakes* (No. 6 on the plan), one on the top of the other. The uppermost of these, which measured internally ·82 m. in length, ·37 m. in width, and ·42 m. in depth, contained a skull and a miniature *bügelkanne*. Near these were two panelled chest-*larnakes* (No. 7), also resting one on the top of the other, and at right angles to the cutting. Between 6 and 7, supported by the edges of the two lower *larnakes*, was a small painted *situla* with two vertical handles rising from the rim. In these cases of superposition the upper *larnax* was carefully set on the lower one, so as to

stand steadily and not to damage it. The difficulty of digging holes in the rocky soil gives a sufficient explanation for the practice of putting one burial on the top of another after only a short interval of time.

A few inches further on was a very small oval *larnax* containing the frail bones of a child and six glass-paste beads. Beyond this was a small inverted tub, beneath which were the bones of a child three to four years old. From the position of the bones it appears that the body was laid in a natural posture on the left side, with the knees considerably drawn up. The position is that of a body found in the cemetery at Patema described in *B.S.A.* ix. 355, Figg. 5, 6.

In the surrounding earth were fragments of a number of similar *larnakes*, two poorly engraved lentoid seal-stones, about a dozen beads of glass-paste, and several small cylindrical jars, one of which is shewn in Fig. 8, *c*. A fine steatite bowl was found, ·16 m. in greatest outside diameter, of the same general form as the blossom bowls, but decorated with skilfully curved vertical flutings.

The similarity of the style shewn by all the painted pottery found, forbids our placing any very long interval between the earlier and the later interments. A difference in style certainly exists between the strainer mentioned above as the earliest of the vases and such *bügelkannen* as that shewn in Fig. 8, *b*, just as the papyrus-like design on the broken fragments of the earlier *larnax* in No. 3 is earlier than the meaningless pattern of waved lines painted on some of the other *larnakes*, but this difference is only such as is bound to exist in a cemetery used long enough for earlier interments to be broken up to make way for later ones. The finds shew quite clearly that this cemetery was in use in the earlier part of the Late Minoan III period, the period, that is, of the occupation of the palace of Block δ. In the section of this report dealing with this, the characteristics of this period are described more at length.

C. T. CURRELLY.

THE PENROSE MEMORIAL LIBRARY.

THE new Library of the British School at Athens, built as a memorial to the late Francis Cranmer Penrose, first Director of the School, was formally opened by H.R.H. the Crown Prince of Greece at a meeting held on Saturday, April 8th, 1905, at 3.30 p.m. There were present their Majesties the King and Queen of the Hellenes, the Crown Prince and Princess, Prince and Princess Nicholas, Prince Andreas of Greece, Princess Louis of Battenberg, and the members of their suites, the British Minister, Sir Francis Elliot, K.C.M.G., and Lady Elliot, and the diplomatic representatives of France, Germany, Roumania, Russia, and the United States, Mr. C. Carapanos, Minister of Public Instruction, Prof. Spyridion Lambros, Rector of the University, Dr. Cavvadias, Ephor-General of Antiquities, the Hon. Reginald Walsh, British Consul, and many other members of the official world of Athens. Practically all the Vice-Presidents and most of the members of the Committee of the Congress including all the Directors of the foreign schools attended, besides many other scholars and archaeologists. During the ceremony the following speeches were delivered :—

MR. GEORGE A. MACMILLAN.

Before asking you, Sir, to declare this Library open, it seems appropriate that a short statement should be made on behalf of the Committee of the British School at Athens as to the circumstances which have preceded this interesting occasion, which marks an epoch in the history of

the School. It is close on twenty years since the School was established on this site, generously presented to us by the Greek Government. The Director's house, including the original School Library, was built from the plans of our first Director, the great exponent of the principles of Athenian Architecture, Mr. Penrose, whose work for the School we are commemorating to-day. He was succeeded as director by one of the first Students of the School, Mr. Ernest Gardner, who held office for nine years, during which much good work was done, in spite of difficulties due to lack of adequate funds. It was in this period that successful excavations were conducted by the director and students in the island of Cyprus and at Megalopolis, while two of the students, Mr. Schultz and Mr. Barnsley, made elaborate investigations in the Byzantine architecture of Greece. Ten years ago, in 1895, a determined effort was made to improve the financial position of the School. An appeal to the British Government resulted in a grant of £500 a year being made to the School from the public revenue. About the same time the Prince of Wales, now King Edward VII, who had taken an active part in the foundation of the School, on lines originally laid down by Sir Richard Jebb, summoned a meeting at St. James's Palace with a view to enlisting further support for the School. This meeting, at which you, Sir, were present, and kindly spoke on behalf of the School, led to a considerable increase in our private subscriptions and donations. Shortly afterwards Mr. Cecil Smith, of the Department of Greek and Roman Antiquities in the British Museum, was, by special arrangement with the Trustees of the Museum, appointed Director of the School for a term of two years. During Mr. Smith's directorship important excavations were undertaken in Athens and in the island of Melos. The foundation of the Students' Hostel, to which the Penrose Library has now been added, was also due to Mr. Smith's initiative and has been of permanent advantage to the efficiency of the School. The valuable library of the late Mr. Finlay, generously presented to the School by his surviving executor Mr. Cooke, found a home in this hostel, and a tablet will shortly be erected in commemoration of the gift. Mr. Smith was succeeded by the well-known explorer Mr. Hogarth, a former student of the School, who, during his three years' term of office, carried to a successful conclusion the excavations begun by Mr. Smith at Phylakopi in the island of Melos. It was also during Mr. Hogarth's administration that the change in the political condition of Crete first threw open that island to the series of

important excavations among which Mr. Arthur Evans' marvellous discoveries at Knossos hold the leading place. From the outset the School has worked in conjunction with the Cretan Exploration Fund, and it was as Director that Mr. Hogarth in 1900 discovered some ancient houses on the hill south of Knossos. In the following year Mr. Bosanquet, who had already served a long apprenticeship as a student, became Director of the School, and happily still holds office. Under his successful administration further fruitful excavations have been undertaken, at Praesos and at Palaikastro in eastern Crete. Last year through the courtesy of Mr. Cavvadias the School received permission to conduct explorations in Laconia, the first fruits of which will be found in the elaborate catalogue of the Museum at Sparta, ably prepared by the Assistant Director Mr. Marcus Tod, and Mr. A. J. B. Wace, and shortly to be published by the Oxford University Press. In this brief summary of the work of the School up to the present time stress has been laid on the excavations undertaken from time to time conjointly by the Director and Students. But it is right to mention also the work of some individual students, such as the researches carried out by Dr. J. G. Frazer in preparation for his monumental edition of Pausanias: the elaborate surveys made by Mr. Loring in the Peloponnesus, and by Mr. Woodhouse in Aetolia, and the more recent researches of Mr. Hasluck on the site of Cyzicus.

We come in conclusion to the particular occasion of this present gathering. When the Students' Hostel was first built it was always hoped that in the end its plan would be completed by the addition of a large room to serve at once as a Library and as a place for the public meetings of the School. When our first Director, Mr. Penrose, died in February 1903, it was felt that the building of this Library would be the most appropriate memorial of his great services to Athenian archaeology. Accordingly a Committee was appointed on which the School, the Hellenic Society, and the Royal Institute of British Architects were represented, and the work of this Committee in carrying the scheme to completion will presently be described by one of the Secretaries, Mr. Cecil Smith, ex-Director of the School, and now Keeper of Greek and Roman Antiquities in the British Museum.

H.R.H. THE CROWN PRINCE OF GREECE.

I am grateful to the President, Council, and Director of the British School of Athens for asking me to perform the ceremony of opening the Penrose Memorial Library, erected by contributions from his friends and admirers, and of unveiling the Inscription dedicated to his memory as the first Director of the British School at Athens, which has been placed over the fireplace in this room.

Mr. Penrose's enthusiastic activity and lasting achievements in Greek archaeological research during his long and busy life are well known and deeply and gratefully appreciated by everyone interested in Hellenic studies. It was in this particular branch of science that he won his first recognition, and his discoveries which followed are a monument that will last as long as Greek Archaeology is studied. More than half a century ago he discovered the curved lines of the Parthenon, and laid down the principles of Athenian architecture. Since then he eagerly pursued his studies even beyond the eightieth year of his life.

His personality stands out in the memory of all who had the privilege of knowing him, as that beautiful and rare combination of a stern sense of duty, of pure and lofty intellectual aspirations, and a warm-hearted, kindly disposition almost childlike in its simplicity. Such is the memory we have of him here in Greece.

Moreover, we feel deeply grateful to him for the disinterested and efficient help he always rendered us in matters concerning the preservation of our ancient monuments. His enlightened advice on the preservation of the Parthenon greatly advanced our work in that momentous task, as also in the restoration of the lion on the battlefield of Chaeroneia.

As President of the Greek Archaeological Society, it is my pleasant duty to announce that the Society has decided to seize this opportunity of showing its feelings of admiration and gratitude to the memory of the great architect and archaeologist, by presenting his bust, in marble, to this Library, with the request that it be placed in this building.

I now declare the Penrose Memorial Library open.

MR. CECIL H. SMITH.

I should like, Sir, to be allowed to supplement in a few words the account which Mr. Macmillan has given of the building in which we stand.

The desirability of providing some accommodation for the students of the British School was strongly impressed on me during my first season as Director. Inasmuch as the School is situated at some distance from the Hotels, members of it were often put to considerable inconvenience in being separated so far from the natural centre of their work, the library having been, until now, located in the Director's house. Moreover, being scattered in different parts of the town, they lacked that corporate unity which is so marked a feature of English University life, and the daily opportunity of exchanging experiences and ideas which must necessarily be valuable to workers engaged in common interests. The experiment was tried in the winter of 1896 of collecting the students in a house not far from here; and as this proved successful, the Committee of the School agreed to adopt the principle, and Mr. Penrose was invited to draw up the first plans for a Students' Hostel. These plans formed the basis of a scheme which was evolved on the spot by the then architectural student of the School (Mr. Charles Clark) and myself and put into final shape by an Athenian architect (Mr. Moussis). A subscription list was set on foot in England, a sufficient fund was soon collected, and in January 1897 the building was actually begun. As a tribute to its Hon. Sec. to whom the School had since its commencement owed so much, it was decided to give it the name of the Macmillan Hostel.

In drawing up the plans, we had to bear in mind the fact that the funds at first available would not permit of an extensive building; moreover, as the Hostel was still in the experimental stage, it was thought advisable to commence on a limited scale. What was needed was an elastic plan which should meet not only the immediate requirements, but also prove susceptible, whenever the occasion should arise, of subsequent extension and completion. The idea of adding a library was always kept in view, and of late years became more prominent as the available book space in the Director's house became more and more exhausted. In 1903, Mr. Comyn, architectural student of the School, was requested to draw up a

scheme for the completion of the work, and under the immediate supervision of the Director, Mr. Bosanquet, the plan of the building as it now stands was definitely settled. In England Government assistance for enterprises of this nature is not usually forthcoming, and so recourse was once more had to public subscription. At this moment the question had independently arisen of providing a memorial to Mr. Penrose, then recently deceased, and it was felt that no more appropriate memorial could be devised than a Library attached to the School with which he had long been closely associated. A joint Committee was formed, on the lines which Mr. Macmillan has described, and during the spring of 1903 the arrangements were completed. The amount available by subscription received a timely addition in the form of a considerable sum, the balance of a fund raised for a memorial to the late President of the R.A., which the executors of Lord Leighton generously devoted to this purpose. And in the autumn of 1904 the work was put in hand.

To the various expressions of sympathy with the Penrose Memorial Scheme received by the Committee, your Royal Highness as President of the Archaeological Society has now added one which will be especially valued by all those who are interested in this Memorial Building.

The bust of Mr. Penrose, executed in Athenian marble by an Athenian artist, will stand as a permanent record, not only of the esteem in which our distinguished countryman was held by the Hellenic nation, but also of the excellent relations which have existed, and, we trust, may always exist, between the British School and its hosts.

In conclusion, Sir, may I be permitted to express in the name of the Committee the satisfaction which we feel in seeing you here to-day—a further proof of the interest which the Royal Family of Greece has from the commencement shown in our undertaking? On the west side of this Hostel is a tablet commemorating the fact that the corner-stone was laid on January 14, 1897, by Her Majesty the Queen of the Hellenes. To-day we who are present at this auspicious ceremony may in a double sense say fittingly

'Finis coronat opus.'

M. TH. HOMOLLE.

Au nom du Comité exécutif du Congrès international d'Archéologie classique, j'ai l'honneur d'apporter à l'illustre Penrose l'hommage du respect et de la reconnaissance des savants du monde entier réunis dans Athènes. Ils remercient les organisateurs de la fête célébrée à sa mémoire d'en avoir fixé la date dans le temps du Congrès et d'y avoir donné un caractère international et une portée universelle, se souvenant que, si le fondateur et le premier directeur de l'École Archéologique anglaise a droit dans cette maison à une religion domestique, à une piété familiale et patriotique, l'auteur des 'Principes de l'architecture athénienne' est du nombre de ces maîtres dont les leçons profitent à tous et dont, par une juste réciprocité, le culte s'impose à tous.

Qui de nous, en effet, Messieurs, au moment d'aborder la discussion des problèmes difficiles qui sont inscrits au programme et que vous impose avec une pressante urgence le devoir de rechercher et de retrouver les monuments antiques, la nécessité de les conserver et de les relever, ne reporte d'abord la pensée vers celui qui avait fait de l'architecture grecque l'étude patiente et passionnée de toute une vie ; qui ne le cherche parmi vous ; qui ne serait heureux d'invoquer les conseils de sa raison si lucide, et de son autorité si courtoise ; qui n'éprouve douloureusement le vide que sa mort a laissé ? Il semble qu' avec lui on eût été assuré de ne point faillir, tant ses fines analyses avaient pénétré avant dans les plus subtiles délicatesses de l'architecture grecque, tant son ardent amour des œuvres antiques lui inspirait pour elles de sollicitude vigilante et de scrupuleux respect. Ce n'est pas lui qui eût laissé en péril les chers monuments faute d'une prévoyance opportune, ni commis non plus la faute, l'impiété d'une restauration indiscrète ou d'une inexacte retouche.

Les recherches qui ont fondé sa renommé sont du milieu de dernier siècle, elles avaient pour objet les édifices de l'Acropole ; il est mort au début de ce siècle, les étudiant toujours, et le crayon est tombé de sa main en dessinant les croquis des restaurations du Parthénon.

Quelle belle unité de vie, quelle admirable leçon de méthode, quel reconfortant modèle de scrupule scientifique, et comme l'ouvrage de Penrose sera bien à sa place au milieu des jeunes gens qui croiraient ici faire l'apprentissage de la science ; comme elle parlera encore aux savants

vieillis dans le métier, comme elle leur prêchera l'inlassable curiosité du vrai qui ne connaît ni la satiété, ni le repos, qui ne s'assure ni ne se satisfait en des opinions toujours incomplètes et décevantes.

C'est cette curiosité qui échauffait son cœur, illuminait son clair et candide regard, qui entretenait dans un corps grêle d'apparence une énérgie qui n'a jamais fléchi, une jeunesse qui n'a subi ni diminution, ni atteinte; c'est elle aussi qui lui inspirait son ardente conviction, qui l'élevait au dessus de toute mesquinerie d'amour propre, de toute jalousie, de tout parti pris obstiné et intolérant. Je remercie nos Collègues d'Angleterre et les savants des deux mondes, qui dans un commun élan d'admiration ont élevé ce monument, d'avoir rendu présent au milieu de nous—autant qu'il le peut, hélas! aujourd'hui—celui de qui nous pouvons recevoir dans notre œuvre archéologique la plus sure et la plus noble inspiration.

PROFESSOR CONZE.

Wenn ich im Namen der andern ausländischen archäologischen Schulen in Athen noch ein Wort des Glückwunschen sagen soll, so ist das leicht.

Die Harmonie, in welcher die Schulen mit einander ihr Werk treiben, bringt es als selbstverständlich mit sich, dass ein freudiges Ereigniss bei *einer* Schule eine Freude ist für *alle*; so, als wir eben erfuhren, dass unserer oesterreichischen Schwesteranstalt der Bau eines eigenen Hauses gesichert ist. Besonders aber geht der Ausbau einer Bibliothek um so mehr jetzt alle Schulen an, als sie sich ja jüngst zu einem Vorgehen im Einvernehmen beim Anchaffen besonders kostbarer Werke vereinigt haben, um vermeidliche grössere Ausgaben für Anchaffung in unnöthig mehren Exemplaren zu vermeiden.

Sie haben den Namen Penrose mit Ihrer Bibliothek verbunden, den hier besonders naheliegenden Namen eines der vielen Engländer, die uns weitergeführt haben in unsern gemeinsamen Studien, von Stuart und Revett an, die uns das Thor zum Tempel der Kenntniss attischer Architektur einst öffneten, zu einer bis heute fortgesetzten Reihe von Forschern. Es sei mir gestattet unter diesen *einen* mit ganz besonders warmer persönlicher Verehrung noch zu nennen, Sir Charles Newton, der auch uns neue Wege wies; und der, wie Herr Macmillan in seiner Geschichte Ihrer Anstalt ausgeführt hat, auch zur Begründung Ihrer Schule erfolgreich mitgewirkt hat.

Glücklich die Anstalt, die auf solchen Fundamenten aufgebaut ist, über denen sie auch ein neues Stockwerk, wie diesen Bibliothekbau, aufführen kann, sicher, dass darin gut wohnen sein wird.

PROFESSOR J. R. WHEELER.

It is my privilege and pleasant duty to bring to the British School to-day a message of goodwill and congratulation from the American School. In a way such an expression from us seems hardly necessary, for we count your success and your happiness as our own success and our own happiness, and we claim a share in the great inheritance which the noble line of British scholars has bequeathed to you.

The organization of our School, depending as it does upon the support of some twenty-five Universities and colleges in different parts of the United States, makes it the representative of educational interests which are widely spread among us. Our School may thus also bring from many lovers of Greece across the seas words of heartiest congratulation, and a tribute of sincere respect to the memory of the great man whose name we are gathered here to honour.

Years ago now, the dividing line which separated our grounds—that generous gift of the Greek Government to us both—was obliterated. Let us hope that its disappearance may be a happy augury for our close association and co-operation in all future time. May our Schools continue to flourish side by side in this home of all who believe in the free development of the human spirit, improving year by year in the quality of their scientific work, and shedding abroad in Great Britain and in America the light of Hellenic learning and the light of Hellenic art.

MR. R. C. BOSANQUET.

It falls to me as Director of this School to express our thanks, and I do so most heartily. First we have to thank the friends whose affection has created this beautiful and worthy memorial, especially Mr. George Macmillan and Mr. Cecil Smith who have acted as Secretaries of the Memorial Fund, Sir Richard Jebb who has composed the dedicatory inscription, and would but for the pressure of Parliamentary duties have been here to-day, Mr. Crace who advised us in the matter of decoration,

and the architect, Mr. Heaton Comyn, a recent member of the School. Among the contributors to the new Library we are proud to count our Patron, His Majesty King Edward, who has been pleased to prove his continued interest in this School by presenting to us his portrait.

Next let me thank all those who have come to take part in this inauguration, and in particular the eminent representatives of French, German, and American Scholarship who have expressed their regard for Mr. Penrose, their sympathy with the purpose of this Memorial, and their good wishes for the future of the School. We owe an especial debt of gratitude to your Majesties, for having found time to honour this celebration with your presence: and to your Royal Highness for having consented to perform this inaugural ceremony, for the generous offer of a portrait-bust of Mr. Penrose, made on behalf of the Archaeological Society of Athens, and for the eloquent terms in which you have described his character and scientific achievements. We rejoice, Sir, that you who this week preside over the International Congress, and have done so much by your personal interest and practical wisdom to ensure its success, have presided on this occasion also when so many members of the Congress have met to honour the memory of our illustrious first Director. To Your Majesties and to Your Royal Highnesses we offer our profound and respectful thanks.

PROFESSOR CHARLES WALDSTEIN.

I have been asked to thank Your Majesties and Royal Highnesses for the honour you have done us in being present here to-day. I wish to add emphasis to two aspects of the ceremony which has brought us together. They have both been ably dealt with, the one by His Royal Highness the Crown Prince, the other by my friend and colleague Professor Wheeler. You, Sir, besides paying tribute to the archaeologist whose memory we are honouring, have eloquently referred to his personal qualities. As one who enjoyed the privilege of his friendship, I wish to bear testimony to the noble and beautiful character of the man, his sincerity, warm-heartedness, and simplicity, that ineffable sweetness of disposition which made him so dear to all who knew him and which will ever keep his memory green in our hearts.

By the peculiar personal conditions of my past life, I feel called upon

to reiterate the wishes expressed by Professor Wheeler. Standing in this School, with the administration of which I am actively concerned, I have loyally at heart the welfare of this national institution of my adopted home; while there, immediately beside us, is the school of my native home, with which I have in the past been intimately connected. I feel that there can be no dividing line between them, either physical or moral. This union in sentiment and aspiration, so real and strong between these two schools, is an earnest of the wider union between the schools of all nations. No fitter place than Athens exists for thus uniting all civilised nations; for Athens is the hearth of our common civilisation, where the first court of international justice was founded, and the poet sang:

Δέξομαι Παλλάδος ξυνοικίαν.

ANNUAL MEETING OF SUBSCRIBERS.

THE Annual Meeting of Subscribers to the BRITISH SCHOOL AT ATHENS was held in the rooms of the Society of Antiquaries, Burlington House, on October 27th, 1904, the Attorney-General, SIR ROBERT FINLAY, K.C., M.P., in the Chair. The following Report on the Session 1903–1904 was submitted by the Secretary (Mr. J. FF. BAKER-PENOYRE) on behalf of the Managing Committee :—

The Session 1903–1904 has been rendered noteworthy by the erection of the Penrose Library, by the continuously successful excavations in Crete, and by the inception of the Lakonian survey.

The Director's Work.—Mr. Bosanquet arrived in Greece October 13, 1903, and left July 2, 1904. Most of his work is described in the account of the various excavations undertaken by the School given below, but the season's work in Athens also bears witness to his customary energy. He took part in two of the five open meetings held at the School, and gave, in addition to some less formal teaching in the Museums, a course of six lectures on the Bronze Age in the Aegean. His contributions to the *Annual* of the School and to the volume on Phylakopi were written during his residence in Athens, where he also corrected charts for the Admiralty, superintended the making of a reduced copy of the Cerigotto bronze for the South Kensington Museum, acted as Librarian during Mr. Tod's absence, and devised several improvements in the *temenos* of the Hostel. He went to Crete in the autumn and again for nearly two months in May, and visited Sparta in December and April.

The Assistant Director.—Mr. Tod, to whose 'loyal help, zeal, and efficiency in every direction' the Director desires again to testify, spent the first three and a half months of the Session in Athens where he was engaged upon his duties as Librarian and upon a study of the literature dealing with Lakonia. Later in the year he paid a series of visits to Sparta, devoting himself especially to topographical and epigraphical study, and catalogued the inscriptions in the local museum. He also travelled in Messenia, where he obtained some interesting inscriptions including a new fragment of the Greek text of Diocletian's Edict. He contributed papers to *B.S.A.*, vol. ix. (the substance of which was delivered at open meetings of the

School), to the *Athenische Mittheilungen*, and to the *Ephemeris Archaiologike*, and has material in hand, both from Athens and Sparta, for the next volume of the School *Annual*. It was not until late in August that he returned to England for a short holiday, having spent ten months in Greece.

The Library and the Hostel both bear witness to Mr. Tod's careful management. The Library records shew an increase in every direction, particularly in the number of volumes presented, and the crowded state of the shelves at the end of the Session will make the new Library doubly welcome. The Directors of the various Schools in Athens have recently agreed to exchange lists of the acquisitions of their Libraries at the end of each quarter, the principle being re-affirmed that each Library should aim at completeness in the publications of its own country. Despite the prolonged absence of several students in Crete and Lakonia, the rents of the Hostel amount to £62, the highest amount yet realised. Some improvements have been effected in the furniture of the Finlay Library, and the present seems an opportune moment for carrying out a proposal, made some time ago, to affix to the Library chimney-piece a bronze tablet to commemorate both the former owner and the donor of the books.

The Students.—Last year two Fellowships at Oxford were awarded to Members of the School, to Mr. Tod at Oriel and Mr. E. W. Webster at Wadham. During the past Session two of our Members have been elected to Fellowships at Cambridge, in each case as the direct result of work done in connexion with the School. Mr. F. W. Hasluck has been elected a Fellow of King's, on a dissertation dealing with Cyzicus, and Mr. R. McG. Dawkins, a Fellow of Emmanuel, with the understanding that he shall devote the next three years to continuing his archaeological and philological researches. The School has further to congratulate Mr. A. J. B. Wace, of Pembroke College, Cambridge, on his recently announced election to a Fellowship at Pembroke College, Cambridge. Besides the Director and Assistant Director, five second-year students, Messrs. Comyn, Currelly, Dawkins, Forster, and Wace, and three recruits, Mr. Caspari, Mr. Stokes, and Miss M. K. Welsh, now Mrs. A. M. Daniel, have taken part in the School's work.

Mr. O. B. Caspari, Scholar of Corpus Christi College, Oxford, and University Scholar in German, was absent from England four months. He attended lectures at Athens, took part in Professor Ernest Gardner's cruise, and afterwards made some stay in Melos, where he obtained about a score of unpublished inscriptions and other archaeological material. It is hoped that he may be able to come out for a second Session.

Mr. C. H. Heaton Comyn, A.R.I.B.A., Architectural Student of the School, arrived in Athens March 21, and spent his first month completing the working drawings of the Penrose Library and the new wing of the Hostel. He then left to continue his work on the site of Palaikastro, visiting on his way the excavations at Knossos, Phaistos, Agia Triada and Gournia. At Palaikastro he worked for six

weeks on the plans of the site, and on his return to Athens superintended the building of the Library.

Mr. C. T. Currelly, of Victoria College, Toronto, has pursued his studies of the prehistoric period in the Levant throughout the year. During October he was at Candia making drawings of vases. He then joined Professor Petrie in Egypt and excavated there until April, when he returned to Palaikastro. He left Crete in July and has since been travelling in Palestine.

Mr. R. McG. Dawkins, Fellow and late Research Student of Emmanuel College, Cambridge, and School Student, was absent from England nine months, of which six were spent in Crete. He spent the autumn in the Museum at Candia, the winter partly at Athens and partly in Egypt, and afterwards superintended the excavations at Palaikastro pending the Director's arrival. His philological studies of the dialects of Carpathos and Palaikastro, as well as numerous drawings of Palaikastro pottery, await publication.

Mr. E. S. Forster, Scholar of Oriel College, Oxford, spent his first month in Athens working on the topography and history of South-West Lakonia, whither he proceeded in March. His investigations in this district, which included detailed examination of many sites and inscriptions, occupied him till May. The most interesting of his discoveries are the sites of Thalamae and the oracle of Ino-Pasiphae, both attested by inscriptions. He took advantage of his journeys to and from the School to visit the Museums of Rome, Naples, and Sicily.

Mr. J. L. Stokes, Scholar of Pembroke College, Cambridge, and holder of a grant from his College, spent more than six months in Greece. Besides following a course of general study both on sites and in Museums, he assisted in the Palaikastro excavations and took up as a special study the Rhodian pithoi with archaic stamped reliefs and the Melian gems in the School Collection.

Miss M. K. Welsh, Marion Kennedy Student of Newnham College, Cambridge, and holder of a grant from the School, made Athens her headquarters from October to May, making several excursions to sites in Greece. She has devoted special attention to Portrait and Honorary statues and has prepared some of her results for publication.

Mr. A. J. B. Wace, Scholar of Pembroke College, Cambridge, Craven Student, and Student of the British School in Rome, worked in connexion with the School at Athens, though his residence in Greece was not long enough for him to qualify, technically, as a student of this Session. After acting as Secretary to Professor Ernest Gardner's tour among the Greek islands, he devoted his attention to Lakonian Sculptures, in particular to the preparation of the Catalogue of Sculpture in the Museum at Sparta. His work on Hellenistic Sculpture has been continued in various European Museums.

Among other unofficial workers at the School may be mentioned Miss Louisa Pesel, Associate of the School and Directress of the Royal Hellenic School of Needlework, who has made use of the School Library for Hellenic and Byzantine designs; Miss Mona Wilson, Newnham College, Cambridge; Messrs. J. S. Carter, King's College, Cambridge; B. Townsend, New College, Oxford; A. M. Daniel,

Trinity College, Cambridge; Fletcher, Oriel College, Oxford; Berkeley Smith, Oriel College, Oxford; and Messrs. Stapleford and Barber, of Victoria College, Toronto.

Excavations in Crete.—Our fourth campaign has resulted in the solution of one of the problems which attracted us to Eastern Crete. The discovery of an inscription, in itself a document of the highest interest since it preserves the text of an ancient Hymn addressed to the Cretan Zeus, leaves no doubt that a temple of Ζεὺς Δικταῖος stood in classical times on the ruins of the Minoan town at Palaikastro. The remains of the temple have been dispersed, by the search for building materials and the processes of cultivation, over a large area, and the inscription was found at some distance from it. Among the other finds from the neighbourhood of the temple were architectural fragments, tripods, the statuette of a bull, and other bronze objects. Part of this productive area, including the actual site of the temple, still awaits excavation.

The Hymn to Zeus consists of five fragments of a slab of grey marble, roughly speaking; one metre by half a metre. It is engraved on both sides, one side giving a rough and faulty copy of the hymn, and the other side a more complete and correct version. The lettering is about third century A.D. The language of the hymn Sir Richard Jebb considers to be sixth or seventh century B.C. There are six stanzas, the opening lines recurring as a refrain. In them Zeus is addressed as μέγιστε Κοῦρε, and bidden to his yearly feast. In the first regular stanza the chorus describe themselves as standing round his altar and singing to the harp and flute. In the second they tell how the Kouretes received the infant Zeus from his mother Rhea and guarded him in the Dictaean cave. The third verse is lost; the fourth ended with the words 'peace-lover of prosperity.' In the fifth the god is invoked as the source of fertility for flocks and fields; in the sixth, apparently as the protector of sea-going ships and of justice between man and man. The identification of the temple of Dictaean Zeus restores to the plain of Palaikastro its Hellenic name of Heleia mentioned in the arbitration between Itanos and Hierapytna. But the exaggerated expectations aroused by the supposition that this temple was a storehouse of local decrees do not seem likely to be realised.

The excavations at Palaikastro went on for three months, Mr. Dawkins, Mr. Stokes, Mr. Currelly, Mr. Comyn, and the Director taking part. Mr. Comyn did very useful work in making complete plans of the excavated area. The programme was to complete the excavation of Block Δ, to investigate the temple-area, and to search for a possible palace on the two knolls that rise above the town. Of these three the last was the first to be attempted; though no palace was found, two houses on the North-West hill were of better character than the others, which for the most part were small and much rebuilt. From this tract came two ivory figurines, a bronze ewer, and a painted bath of larnax form. Block Δ proved to contain a Late Minoan palace or Government house. Though much of the ashlar masonry had been removed, some of it in the memory of man, enough

remained to shew a ground plan of unique interest. From some storehouses on one side of this came a quantity of painted pottery and a series of terracotta figures of goddesses, one grasping a snake. At the deeper levels were found stratified remains of very ancient fabrics, previously almost unknown.

Mr. Dawkins' work in the cemeteries yielded some interesting objects—a small ivory cone with intaglios of animals, a little gold bird, a bronze dagger from the Patema ossuary; and from a smaller one on the headland of Kastri a three-sided seal, a bowl of green schist, and some miniature bronze sickles. In a more ancient burial-place was found among other objects a remarkable clay model of a boat with two thwarts, a high poop, and a ram. Mr. Currelly had the good fortune later on to discover on the slope south of Roussolakkos some fragments of a steatite rhyton with remains of gold plating showing a wild boar charging and also some parts of a steatite libation table with Minoan characters incised.

In May the Director found a Late Minoan Cemetery on the cliff south-east of Roussolakkos. The bodies had been skeletonised and in some of the larnakes two or three skulls were found. Among the objects found with them were a razor, a mirror, beads, a steatite bowl, and a series of decorated vases resembling the pottery found in the storehouses of the palace. On this cliff was also found a quantity of Middle Minoan polychrome ware, some of it in three colours on a dark ground, and some with human figures and fish, which are rare among the designs of this period.

Among the minor finds were some terracottas of interest; a rhyton decorated with the head of a goat; some double axes and other implements; about fifteen gems, and some stone vases. Besides the two ivory figurines there was a flat ivory plate with a carving of crocodiles—a novelty in Minoan art. About thirty stone celts were found or bought. A shuttle-shaped vase had on its inner surface the impression of a finely woven fabric. Some fragments of the egg of an ostrich were also found at a great depth. Both the temple site and the houses in the town require another season's excavation.

Some supplementary excavations were made at Praesos: on the terraces below the altar hill a fragment of an Eteocretan inscription was found, and also fragments of Greek inscriptions. There were besides numerous architectural members of Hellenic character; enough terracottas were found to reconstruct a cornice.

Thanks to Mr. Hogarth, Mr. Dawkins and Mr. Stokes went to Palaikastro on Mr. Armour's yacht. Dr. Dörpfeld very kindly allowed his photographer to take a set of photographs of the site; and the doctor of the French regiment at Canea, who came with Captain Escandre of the *Condor*, attended to one of the workmen whose collar-bone had been broken by a fall of earth. The money spent at Palaikastro was £490, and £30 at Praesos. £400 of this amount, including grants from Emmanuel College, Cambridge, and the Fitzwilliam Museum specially earmarked for Palaikastro, was contributed by the Cretan Exploration Fund.

The Survey of Lakonia.—Besides carrying on these researches in Eastern Crete, the School has this year entered upon a new field of work in Lakonia. No

excavations were made, but a detailed surface-study, begun by Mr. Tod in the district of Sparta and by Mr. Forster in that of Gytheion, resulted in the discovery of unpublished inscriptions and the identification of ancient sites. It is hoped in future years to extend this systematic exploration over the whole area of the Lakonian province. Our scheme has the cordial approval of Dr. Kavvadias, the Ephor-General of Antiquities at Athens, and has met with most encouraging support from the curators of the local collections at Sparta and Gytheion, Professor Gregorákes and Mr. Patsourakos.

As the first-fruits of this new undertaking the Committee proposes to publish a descriptive catalogue of the important collection of antiquities preserved in the Sparta Museum. The inscriptions have been catalogued by Mr. Tod, the sculptures by Mr. Wace.

Open Meetings.—Five open meetings were held during the winter, and the following papers were read :—

Friday, Jan. 15.—	The Director :	Recent Work of the School.
„ „	Mr. R. M. Dawkins :	A Journey in Karpathos
Friday, Jan. 29.—	Dr. A. Wilhelm :	Ueber die Zeit der Attischen Fluchtafeln.
„ „	The Assistant Director :	Outlying Sites near Palaikastro.
Friday, Feb. 12.—	The Director :	A Grave in Euboia.
„ „	Dr. A. N. Jannaris :	The Influence of Latin upon contemporary Greek Orthography and Pronunciation, as illustrated by Inscriptions and Papyri.
Friday, Mar. 11.—	The Assistant Director :	A new Attic Decree.
„ „	Mr. R. M. Dawkins :	The Pottery of Palaikastro.
Friday, Mar. 25.—	Dr. G. P. Byzantinos :	Ἀναθηματικὸν τῷ Ἀσκληπιῷ ἀνάγλυφον.
	Mr. E. S. Forster :	Gytheion.

Publications.—The results of the four years of excavation in Melos have now been published in a fine quarto volume entitled *Excavations at Phylakopi*, produced at the expense of the Society for Promotion of Hellenic Studies. The Committee desire to express their gratitude to the Council of the Hellenic Society and in particular to Mr. G. F. Hill, whose editorial labours have been unusually heavy.

In like manner the Committee and the School at large are deeply indebted to Mr. Cecil Smith for his indefatigable zeal in editing the *Annual*. The recent volume surpasses its predecessors not only in size but in the varied interest of its contents and in the excellence of its illustrations.

The Penrose Memorial Library.—The most important event of the year has been the building of the Penrose Memorial Library. It will be remembered that in last year's report the scheme was announced of perpetuating the memory of the late Mr. Penrose by the erection of a new Library bearing his honoured

name. We are to-day able to announce its approximate completion. The new Library will afford ample space for the growth and orderly classification of the books and also for our Open Meetings. In dealing with the questions that arose the Director had the benefit of consultations with Dr. Dörpfeld, who was so good as to put at his disposal the plans and accounts relating to the building of the new German Library.

Preliminary work was begun on Monday, March 14 (March 1, old style), and on March 16 Lady Evans performed the ceremony of turning the first sod, afterwards making an eloquent speech. The other speakers were Sir Francis Elliot, H.B.M.'s Minister at Athens, Sir John Evans, Dr. Dörpfeld, and Mr. Bikelas, who represented the Greek Archaeological Society in the absence of Mr. Kavvadias.

The Architect, Mr. Comyn, arrived on March 21 and at once began to prepare the working drawings. These were finished on April 21 and furnished the basis for a detailed agreement with the Contractors, signed on May 3.

The walls of the Library were built in May and completed in August, and should be dry enough for the reception of book-shelves and books about December.

As soon as the scheme for the Memorial became known in Athens, the Athenian Archaeological Society offered, through Mr. Kavvadias, to present to the Library a bust of Mr. Penrose, to be executed by a well-known Greek sculptor. It need not be said that this offer, accompanied as it was by cordial expressions of regard and admiration for Mr. Penrose on the part of Greek archaeologists, was gratefully accepted.

Acknowledgments, etc.—Acknowledgment has already been made of the kindness the School has met with from friends both old and new, in the course of this report. There remain one or two names for special mention.

By the promotion to the Embassies, first at Madrid and subsequently at Rome, of Sir Edwin Egerton, G.C.M.G., British Minister at Athens since 1892, the School has been deprived of the counsels and support of a valued and powerful friend. Sir Edwin has always shewn a most generous interest in the welfare of the School; and the kind hospitality which he and Lady Egerton have extended to all its members must remain among our most pleasant memories of Athens.

We have been fortunate in the appointment as his successor of another old friend of the School, Sir Francis Elliot, K.C.B., who was Secretary of Legation for some years during Professor Ernest Gardner's Directorship. Both Sir Francis and Lady Elliot have already shewn that their goodwill towards the School has been in no way diminished by their long absence.

Another friend and neighbour, M. Th. Homolle, has left Athens to take up the control of the art-collections of the Louvre. During the fifteen years for which he has been Director of the French School, M. Homolle has won universal respect, and much genuine feeling was manifested at a farewell luncheon given in his honour by his Athenian friends. Prominent politicians of all parties, professors of the University, and native and foreign archaeologists were present to the number of seventy; the Director and Mr. Tod represented the British School.

Among those who have presented books during the past year are the Cambridge University Press, the University of Upsala, the Hydrographic Department of the Admiralty, the Trustees of the British Museum, the Hellenic Society, the Bollandist Society, the Greek Archaeological Society, and Messrs. C. Buls, S. P. Cockerell, A. Cordellas, C. C. Edgar, S. Eitrem, E. S. Forster, F. W. Hasluck, P. D. Kalogeropoulos, R. G. Kent, John Murray, P. Negris, I. D. Patsourakos, C. Watzinger, and A. Wilhelm. Special thanks are due to Prof. George Aitchison, R.A., for two folio volumes of Choisy, *L'Art de Bâtir chez les Romains*, to Mr. J. D. Bourchier, whose gift of the *Encyclopaedia Britannica* reached us in October last, and to M. Choisy, who has most generously offered to present to the School such of his works as it does not already possess, as a souvenir of his recent visit to England to receive the Gold Medal of the Royal Institute of British Architects.

Finance.—The appended accounts shew that the total expenditure of the year has exceeded the total receipts by about £72, whereas last year resulted in a final surplus of £324 10*s.* 9*d.* The difference, however, is less unsatisfactory than it appears. Last year the Committee reported the receipt from the late Lord Leighton's sisters of a special donation of £154 16*s.* 6*d.*, which they proposed to devote to the building of the Penrose Memorial Library. It was this donation which enabled them this year to make a grant of £200 to the building, so that the increase of last year's receipts and this year's expenditure may fairly be set against one another. By a generous grant of £50 the Goldsmiths' Company shew that they believe the School to be an instrument of scientific research worthy of their support.

The expenditure on the new number of the Annual has again been heavy, but the Committee remark with satisfaction a large and growing increase in the sales, which bid fair to recoup in time a material portion of this heavy outlay.

Turning to the future, the Committee cannot contemplate without anxiety the prospect of very considerable expenditure in the near future on two items—the furnishing, heating and lighting of the new Library, and the printing of the Catalogue to the Museum at Sparta. The first alone will probably cost some £500; and they have again to appeal to the generosity of the public to enable them to carry out work which they are assured will materially contribute to the usefulness and reputation of the School.

In moving the adoption of the Report, the CHAIRMAN dwelt on the importance of the researches and discoveries of the excavator. Some people felt a certain impatience of the details of this research, but he was sure that the knowledge thus gained was all-important for the right understanding of ancient literature and art, and that the student could not appreciate their full meaning until he realised the actual conditions which produced them. The work of the British School had assisted in the revolution which had been effected in our ideas of ancient Greece. We know now that Greek art was not the result of a sudden impulse from within, but that for a long period prior to classical times there had existed a high state of

civilisation in Crete, and that the people whom we knew as Greeks had inherited a great deal from their predecessors in and about the Aegean Sea. He congratulated the School on the good work it had done.

Sir JOHN EVANS seconded the adoption of the Report, which was carried unanimously. Mr. BOSANQUET then gave an interesting account of the work of the past year, which he illustrated by diagrams and lantern-slides.

On the motion of Mr. H. AWDRY, seconded by Mr. W. LORING, the following resolution was carried unanimously:—"That the retiring members of the Committee, Prof. P. GARDNER, Prof. E. GARDNER, and Dr. WALDSTEIN, be re-elected, and Mr. VINCENT YORKE be elected a member of the Committee; that Dr. LEAF be re-elected Hon. Treasurer; that Mr. BAKER-PENOYRE be re-elected Secretary; and that Sir FREDERICK POLLOCK and Mr. EDWIN WATERHOUSE be elected auditors for the coming year."

On the motion of Prof. REID, seconded by Mr. H. SEEBOHM, a vote of thanks was accorded to the Auditors.

After a vote of thanks to the Chairman, moved by Prof. S. H. BUTCHER and seconded by Mr. MACMILLAN, the meeting terminated.

THE BRITISH SCHOOL AT ATHENS.

1903–1904.

RECEIPTS AND EXPENDITURE ON ACCOUNT OF REVENUE AND EXCAVATIONS,

4TH OCTOBER, 1903, TO 4TH OCTOBER, 1904.

	£	s.	d.	£	s.	d.
Subscriptions received or due during the year	900	17	0			
Government Grant	500	0	0			
Interest on Investment to 5th July	57	3	9			
Interest on Deposit to 30th June	5	18	3			
Sale of Annual	73	19	3			
Special Donations for Excavations	401	1	0			
House Maintenance, year to Midsummer 1904				29	18	8
Hostel Maintenance, year to Midsummer 1904	82	18	11			
Less Students' Fees	62	17	10			
				20	1	1
Director's Stipend, one year to Midsummer 1904				500	0	0
Publication of Annual				354	15	8
Printing, Postage, and Stationery				21	0	6
Assistant Secretary's Salary, and Sundries				27	1	7
Studentships—						
Miss Welsh	50	0	0			
Mr. Heaton Comyn	100	0	0			
Mr. Currelly	40	0	0			
Mr. Dawkins	100	0	0			
				290	0	0
Excavations, Expenditure, Crete				553	2	11
Do. Do. Cyzicus				2	18	0
Balance, being excess of Receipts over Expenditure				140	0	10
	£1,938	19	3	£1,938	19	3

RECEIPTS AND EXPENDITURE ON CAPITAL ACCOUNT,

4TH OCTOBER, 1903, TO 4TH OCTOBER, 1904.

	£	s.	d.	£	s.	d.
Donations, as per list	99	8	0	Library	101	12	0
Balance, being excess of Expenditure over Receipts	211	15	10	Furnishing	9	11	10
				Penrose Memorial Fund	200	0	0
	£311	3	10		£311	3	10

BYZANTINE ARCHITECTURE FUND.

	£ s. d.		£ s. d.
Balance from last Account . .	53 16 8	Balance carried forward . . .	53 16 8

BALANCE ACCOUNT, 4TH OCTOBER, 1904.

	£ s. d.	£ s. d.		£ s. d.	£ s. d.
Byzantine Architecture Fund as per Account above		53 16 8	Investment—India 3% Stock, at par .		2,000 0 0
Subscriptions paid in advance . .		5 2 0	Deposit Account at Bank . .		600 0 0
Balance, representing the funds of the School other than the property in land and building, furniture and library, as per last account .	2,750 17 5		Cash at Bank, as Pass Book . . .	238 1 1	
Balance of Receipts and Expenditure on Revenue and Excavations Account for the year as above . . .	140 0 10		*Less* Cheque not presented . . .	100 0 0	
	2,890 18 3				138 1 1
Less, Capital as above	211 15 10				
		2,679 2 5			
		£2,738 1 1			£2,738 1 1

Examined and found correct.

EDWIN WATERHOUSE, F.C.A.

24th October, 1904.

DONATIONS—1903-1904.

	£	s.	d.
The Worshipful Company of Goldsmiths	50	0	0
The Royal Institute of British Architects	21	0	0
Cornford, F. M.	10	0	0
Elliot, Sir F. E. H.	5	0	0
Mocatta, F. D.	5	0	0
Townshend, Brian	3	3	0
Wroth, Warwick	5	5	0
	£99	8	0

SPECIAL DONATIONS FOR EXCAVATION.

Cretan Exploration Fund	400	0	0
Bonney, Rev. T. G.	1	1	0
	£401	1	0

ANNUAL SUBSCRIPTIONS—1903-1904.

	£	s.	d.
The University of Oxford	100	0	0
The University of Cambridge	100	0	0
The Hellenic Society	100	0	0
The Society of Antiquaries	5	5	0
Brasenose College, Oxford	5	0	0
Christ Church, Oxford	20	0	0
Corpus Christi College, Oxford	5	0	0
Magdalen College, Oxford	10	0	0
King's College, Cambridge	10	0	0
McGill University, Montreal	5	5	0

	£	s.	d.
Acland, Henry Dyke	1	1	0
Agnew, Sir W.	2	2	0
Aitchison, G.	1	1	0
Allbutt, Prof.	1	1	0
Alma Tadema, Sir L.	2	2	0
Anderson, J. R.	1	1	0
Anson, Sir W. R.	10	0	0
Ashby, Thomas	1	1	0
Austen Leigh, E. C.	1	1	0
Austen Leigh, R. A.	1	1	0
Awdry, H.	1	1	0
Bailey, J. C.	5	0	0
Barrington, Mrs. Russell	1	1	0
Barlow, Sir T.	1	1	0
Blomfield, R.	2	2	0
Bodington, Dr. N.	1	0	0
Bosanquet, C. B. P.	1	1	0
Bosanquet, R. C.	1	1	0
Boyle, Miss F.	1	0	0
Brinton, H.	1	1	0
Brook, E. W.	1	0	0
Brooke, Rev. Stopford	1	1	0
Burnett, J. J.	1	1	0
Burnham, Lord	5	0	0
Bury, Prof. J. B.	1	1	0
Butcher, Dr. S. H.	2	2	0
Buxton, H. E.	1	0	0
Campbell, Prof. L.	1	1	0
Carrington, J. B.	5	0	0
Carlisle, Miss	1	1	0
Carr, Rev. A.	1	1	0
Carr, H. Wildon	1	1	0
Caton, R.	1	1	0
Chawner, W.	2	2	0
Christie, J.	1	0	0
Clark, C. R.	1	0	0
Clausen, A. C.	2	2	0
Clissold, H.	1	0	0
Colchester, Lord	5	0	0
Cole, A. C.	2	2	0
Compton, Rev. W. C.	1	1	0
Connal, W.	1	1	0
Carried forward	£436	7	0

ANNUAL SUBSCRIPTIONS—1903-1904 (*continued*).

	£	s.	d.
Brought forward .	436	7	0
Corbett, V.	1	0	0
Cruse, D. A.	1	0	0
Curtis, Miss	1	0	0
Cust, Miss A. M.	1	1	0
Dabis, Miss	1	1	0
Dalton, Rev. H. A.	1	0	0
Davey, Rt. Hon. Lord	5	0	0
Davidson, H. O. D.	1	1	0
Devenish, W. H.	1	0	0
Donaldson, Rev. S. A.	1	1	0
Douglas-Pennant, Hon. A.	1	1	0
Dyer, Louis	1	0	0
Earl, A. G.	1	1	0
Egerton, Rt. Hon. Earl	10	10	0
Elliot, Sir F. E. H.	1	0	0
Elliot, Rev. F. R.	1	1	0
Eumorfopoulos, N.	2	0	0
Evans, A. J.	10	0	0
Evans, Sir J.	5	0	0
Fletcher, H. M.	1	1	0
Fort, J. A.	1	0	0
Fowler, W. W.	1	1	0
Freshfield, D. W.	10	0	0
Frisch, E. S.	1	0	0
Fry, Sir E.	1	1	0
Furneaux, L. R.	1	0	0
Gardiner, E. Norman	1	0	0
Gardner, Prof. Percy	2	2	0
Giveen, Rev. R. L.	1	1	0
Goldsmith, Dr.	1	1	0
Gooch, G. P.	1	1	0
Graham, E.	1	1	0
Griffiths, F. M.	1	1	0
Haigh, A. E.	1	0	0
Handcock, W.	1	1	0
Harvey, H. P.	1	1	0
Hawes, Miss	1	1	0
Hay, C. A.	5	5	0
Heberden, C. B.	2	2	0
Henderson, A. E.	1	0	0
Hill, G. F.	1	1	0
Hodgkin, J. E.	2	2	0
Hodgkin, Miss Violet	1	1	0
Hodgkin, Thomas	10	0	0
Hogarth, D. G.	1	1	0
Hooper, G. N.	1	1	0
Hunt, W. Holman	1	1	0
Hutton, Miss C. A.	1	1	0
Impey, E.	1	1	0
James, Rev. S. R.	2	0	0
Kelly, C. A.	1	1	0
Kenyon, F. G.	1	1	0
Keser, Dr.	1	1	0
L. J. E.	1	0	0
Lascelles, B. P.	1	0	0
Leaf, Herbert	5	5	0
Leaf, Walter	50	0	0
Lewis, Mrs. A. S.	2	2	0
Lingen, Lord	2	2	0
Livesay, W.	1	0	0
Lloyd, Miss	1	1	0
Lorimer, Miss H. L.	1	0	0
Loring, W.	5	0	0
Loring, Miss	1	1	0
Lucas, Rev. A.	1	1	0
Lunn, W. H.	1	1	0
Lynch, H. F.	2	2	0
Macan, R. W.	1	1	0
MacLehose, James J.	1	1	0
Macmillan, G. A.	50	0	0
Mansford, C. Jodrell	1	1	0
Marindin, G. E.	1	1	0
Marshall, Miss A. M. C.	1	0	0
Mayor, R. J. G.	1	1	0
Miller, Rev. A.	1	1	0
Minturn, Miss E. T.	1	1	0
Mitchell, Mrs. E. H.	2	2	0
Mond, Ludwig	100	0	0
Monro, D. B.	3	3	0
Morley, Lord	1	1	0
Morshead, E. D. A.	1	0	0
Myers, E.	1	1	0
Mylne, Mrs.	2	2	0
Newman, W. L.	2	2	0
Nightingale, Mrs. H. Shore	1	1	0
Olding, Mrs.	1	0	0
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Pease, Mrs. J. W.	5	5	0
Pearse, Rev. T. N. Hart-Smith	1	1	0
Pelham, Hon. Mrs. Arthur	1	1	0
Perry, W. C.	1	1	0
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Pesel, Miss Louisa F.	1	1	0
Phillimore, Prof. J. S.	1	1	0
Pilkington, A. C.	1	0	0
Pilkington, R. A.	1	0	0
Pollock, Sir F.	1	1	0
Poynter, Sir E. J.	5	0	0
Rawlinson, W. G.	1	1	0
Reid, Dr.	1	1	0
Rendall, Dr.	1	1	0
Carried forward	£820	9	0

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	£	s.	d.
Brought forward .	820	9	0
Richards, H. P.	1	1	0
Robb, Mrs.	1	1	0
Roberts, Prof. W. Rhys	1	1	0
Rotton, Sir J.	2	2	0
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Seaman, Owen	1	1	0
Searle, G. von U.	1	1	0
Seebohm, Hugh	1	1	0
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Tod, M. N.	1	0	0
Tozer, Rev. H. F.	10	0	0
Tuckett, F. F.	1	0	0
Tuke, Miss	1	1	0
Vaughan, E. L.	1	0	0
Verrall, Dr.	1	1	0
Vince, J. H.	1	0	0
Ward, Dr. A. W.	1	0	0
Ward, John	1	0	0
Waldstein, C.	1	1	0
Warre, Rev. E.	1	1	0
Warren, T. H.	1	1	0
Weber, Sir H.	1	1	0
Wedgwood, G.	2	2	0
Wells, J.	1	1	0
Wernher, Julius	25	0	0
Wilson, R. D.	1	1	0
Total	£900	17	0

	£	s.	d.
Received during the year	898	17	0
Paid in advance last year	7	2	0
	905	19	0
Less Paid in advance at date	5	2	0
	£900	17	0

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Wantage, The Lady, 2, Carlton Gardens, S.W.
Ward, John, Esq., F.S.A., Lenoxvale, Belfast.
Warre, The Rev. E., D.D., Eton College, Windsor.
Warren, T. H., Esq., President of Magdalen College, Oxford.
Waterhouse, Edwin, Esq., Feldemore, near Dorking.
Weber, Sir. H., M.D., 10, Grosvenor Street, W.
Wedgwood, G., Esq., Idle Rocks, Stone, Staff.
Wells, J., Esq., Wadham College, Oxford.
Wernher, Julius, Esq., 82, Piccadilly, W.
West, H. H., Esq., c/o R. W. West, Esq., Casa Bianca, Alassio, N. Italy.
Whateley, A. P., Esq., 4, Southwick Crescent, W.
Wilson, R. D., Esq., 38, Upper Brook Street, W.
Wimborne, The Right Hon. Lord, 22, Arlington Street, S.W.
Winkworth, Mrs., Holly Lodge, Campden Hill, W.
Wroth, Warwick, Esq., British Museum, W.C.

Yorke, V. W., Esq., 9 Upper Brook St., W.
Yule, Miss A., Tarradale House, Ross-shire.

DIRECTORS OF THE SCHOOL.

1886—1904.

F. C. PENROSE, M.A., D.C.L., LL.D., F.R.S., 1886—1887.
ERNEST A. GARDNER, M.A., 1887—1895.
CECIL H. SMITH, LL.D., 1895—1897.
DAVID G. HOGARTH, M.A., 1897—1900.
R. CARR BOSANQUET, M.A., 1900—

STUDENTS OF THE SCHOOL.

1886—1903.

Ernest A. Gardner,	Formerly Fellow of Gonville and Caius College, Cambridge, and Craven University Student. Admitted 1886—87, Director of the School, 1887—1895. Yates Professor of Archaeology at University College, London.
David G. Hogarth,	Fellow and formerly Tutor of Magdalen College, Oxford, and first Craven Fellow. Director of the School 1897—1900. Admitted 1886—87. Re-admitted (for work in Cyprus) 1887—88.
Rupert Clarke,	Exeter College, Oxford. Admitted 1886—87.
F. H. H. Guillemard,	Gonville and Caius College, Cambridge. First University Reader in Geography. Admitted (for work in Cyprus) 1887—88.
Montague R. James,	Fellow and late Tutor of King's College, Cambridge ; Director of the Fitzwilliam Museum. Admitted (for work in Cyprus) 1887—88, with grant of £100 from the University.
R. Elsey Smith,	Professor of Architecture and Construction, King's College, London. Appointed to Studentship by Royal Institute of British Architects, 1887—88.
Robert Weir Schultz,	Admitted as Travelling Student and Gold Medallist of the Royal Academy, 1887—88. Re-admitted 1888—89, 1889—90.
Sidney H. Barnsley,	Admitted as Student of the Royal Academy, 1887—88. Re-admitted 1889—90, 1890—91.
J. A. R. Munro,	Fellow and Tutor of Lincoln College, Oxford. Admitted (for work in Cyprus) 1888—89. Re-admitted (for same purpose) 1889—90.

H. Arnold Tubbs, Pembroke College, Oxford; Craven University Fellow. Professor of Classics at University College, Auckland, N.Z. Admitted (for work in Cyprus) 1888—89. Re-admitted (for same purpose) 1889—90.

James G. Frazer, Fellow of Trinity College, Cambridge. Admitted 1889—90, with grant of £100 from the University of Cambridge to collect material for commentary on Pausanias.

William Loring, Late Fellow of King's College, Cambridge. Examiner in the Board of Education. Warden of the Goldsmiths' College. Secretary of the School 1897—1903. Appointed to Cambridge Studentship, 1889—90. Re-admitted as Craven University Student, 1890—91, 1891—92, and 1892—93.

W. J. Woodhouse, Queen's College, Oxford. Professor of Greek in the University of Sydney, N.S.W. Formerly Lecturer in Ancient History and Political Philosophy at the University of St. Andrew's. Appointed to Oxford Studentship, 1889—90. Re-admitted as Craven University Fellow, 1891—92 and 1892—93.

G. C. Richards, Late Fellow of Hertford College; Lecturer at Oriel College, Oxford. Formerly Professor of Greek at University College, Cardiff. Admitted as Craven University Fellow, 1889—90. Re-admitted 1890—91.

O. H. Parry, Magdalen College, Oxford. Archbishop's Missioner to the Nestorian Christians. Admitted 1889—90.

J. R. Stainer, Magdalen College, Oxford. Admitted 1889—90.

R. A. H. Bickford-Smith, Trinity College, Cambridge. Admitted 1889—90.

A. G. Bather, Late Fellow of King's College, Cambridge; Assistant Master at Winchester College. Admitted 1889—90. Re-admitted 1891—92, on appointment to the Cambridge Studentship 1892—93 as Prendergast Greek Student; and again, 1893—94, as Cambridge Student.

E. E. Sikes, Fellow and Tutor of St. John's College, Cambridge. Appointed to Cambridge Studentship, 1890—91.

J. G. Milne, Corpus Christi College, Oxford. Examiner in the Board of Education. Appointed to Oxford Studentship, 1890—91.

H. Stuart Jones, Fellow and Tutor of Trinity College, Oxford. Director of the British School at Rome. Admitted as Craven University Fellow, 1890—91. Re-admitted 1892—93.

Miss Eugénie Sellers, Admitted 1890—91. (Mrs. S. Arthur Strong.)

F. B. Baker, Christ's College, Cambridge. Assistant Master at Malvern College. Admitted 1891—92.

C. C. Inge, Magdalen College, Oxford. Appointed 1891—92 to the Oxford Studentship.

E. F. Benson, King's College, Cambridge. Admitted 1891—92, with grant of £100 from the Worts Fund at Cambridge; 1892—93 on appointment to the Cambridge Studentship; 1893—94 as Craven Student; and 1894—95 as Prendergast Student.

J. G. Smith, Magdalen College, Oxford. Admitted 1891—92. Re-admitted 1895—96.

V. W. Yorke, Late Fellow of King's College, Cambridge. Admitted 1892—93. Re-admitted 1893—94.

J L. Myres,	Student and Lecturer of Christ Church, and late Fellow of Magdalen College, Oxford. Admitted 1892—93. Re-admitted 1893—94, and 1894—95 as Craven Fellow.
R. J. G. Mayor,	Late Fellow of King's College, Cambridge. Examiner in the Board of Education. Admitted 1892—93.
R. Carr Bosanquet,	Trinity College, Cambridge. Assistant Director of the School, 1899—1900. Director since 1900. Admitted 1892—93. Re-admitted as Craven University Student 1894—95, 1895—96, and 1896—97.
J. M. Cheetham,	Christ Church, Oxford. Admitted on appointment to the Oxford Studentship. 1892—93.
E. R. Bevan,	New College, Oxford. Admitted 1893—94.
A. F. Findlay,	Sent out from Aberdeen by the United Presbyterian Church of Scotland. Admitted 1894—95.
T. Duncan,	Sent out from Aberdeen by the Church of Scotland. Admitted 1894—95.
J. E. Brooks,	St. Peter's College, Cambridge. Admitted 1894—95. Re-admitted as Associate 1896—97.
H. Awdry,	New College, Oxford. Assistant Master at Wellington College. Admitted 1894–95.
Duncan Mackenzie,	Universities of Edinburgh and Vienna. Admitted 1895—6. Re-admitted 1896—97, 1897—98 and 1898—99.
Archibald Paterson,	University of Edinburgh. Admitted 1895—96.
Charles R. R. Clark,	Appointed 1895—96, and re-appointed 1896—97, by the Managing Committee to an Architectural Studentship.
C. C. Edgar,	Oriel College, Oxford. English Member of the Cataloguing Committee, Ghizeh Museum. Admitted 1895—96, and re-admitted 1896—97 (as Craven University Fellow), 1897—98 and 1898—99.
F. R. Earp,	Late Fellow of King's College, Cambridge. Admitted 1896—97
F. A. C. Morrison,	Jesus College, Cambridge. Admitted (as Prendergast Greek Student) 1896—97.
H. H. West,	Trinity College, Cambridge. Admitted 1896—97.
Miss C. A. Hutton,	Girton College, Cambridge. Admitted 1896—97.
Pieter Rodeck,	Architect to Arab Monuments Committee, Cairo. Admitted 1896—97 as Travelling Student and Gold Medallist of the Royal Academy.
J. G. C. Anderson,	Late Fellow of Lincoln College, Student and Lecturer of Christ Church, Oxford. Admitted (as Craven University Fellow) 1896–97.
J. W. Crowfoot,	Brasenose College, Oxford. Education Department, Cairo. Formerly Lecturer in Classics, Mason College, Birmingham. Admitted, on appointment to the Oxford Studentship, 1896—97. Re-admitted 1897—98.
W. W. Reid,	Universities of Aberdeen and Edinburgh. Admitted, as holder of Blackie Travelling Scholarship, 1896—97.
A. E. Henderson,	Owen Jones Student of Royal Institute of British Architects. Admitted 1897—98. Re-admitted 1898—99, 1901—02, and 1902—03.

W. A. Curtis,	Heriot Scholar of Edinburgh University. Admitted 1897—98.
A. J. Spilsbury,	Queen's College, Oxford. Admitted 1897—98, on appointment to the Oxford Studentship.
E. B. Hoare,	Magdalen College, Oxford. Admitted 1897—98, as Architectural Student.
J. C. Lawson,	Fellow and Lecturer of Pembroke College, Cambridge. Admitted as Craven University Student, 1898—99. Re-admitted 1899—1900.
C. D. Edmonds,	Emmanuel College, Cambridge. Assistant Master at Elstree School. Admitted as Prendergast Student, 1898—99.
J. H. Marshall,	King's College, Cambridge. Director-General of the Archaeological Survey of India. Admitted, 1898—99. Re-admitted as Prendergast Student 1900—01
Clement Gutch,	King's College, Cambridge. Lecturer at Girton College. Admitted, 1898—99.
F. B. Welch,	Magdalen College, Oxford. Assistant Master at Pocklington School. Admitted as Craven University Fellow, 1898—99. Re-admitted 1899—1900.
T. D. Atkinson,	Secretary of Cambridge Antiquarian Society. Admitted as Architectural Student, 1898—99.
J. K. Fotheringham,	Merton and Magdalen Colleges, Oxford. Admitted on appointment to Oxford Studentship, 1898—99.
J. H. Hopkinson,	University College, Oxford. Lecturer in Greek, University of Birmingham. Admitted as Craven University Fellow, 1899—1900 and 1900—01.
S. C. Kaines-Smith,	Magdalene College, Cambridge. Admitted 1899—1900, on appointment to Cambridge Studentship.
Miss O. C. Köhler,	Girton College, Cambridge. Admitted 1899—1900.
D. Theodore Fyfe,	Admitted 1899—1900, on appointment to Architectural Studentship. Architect to the Cretan Exploration Fund.
K. T. Frost,	Brasenose College, Oxford. Admitted on appointment to the Oxford Studentship, 1900—01.
R. D. Wells,	Trinity College, Cambridge. Admitted on appointment to the Architectural Studentship, 1900—01.
J. ff. Baker-Penoyre,	Keble College, Oxford. Secretary and Librarian of the Society for Promoting Hellenic Studies. Secretary to the British Schools in Athens and Rome. Admitted 1900—01.
Marcus N. Tod,	Fellow of Oriel College, Oxford; Craven University Fellow; Assistant-Director of the School Admitted on appointment to "Senior Studentship," 1901–02.
F. W. Hasluck,	Fellow of King's College, Cambridge. Admitted on appointment to Cambridge Studentship, 1901—02. Re-admitted 1902—03.
C. Heaton Comyn,	F.R.I.B.A. Admitted on appointment to the Architectural Studentship, 1901—02. Re-admitted 1903-04.
Miss H. L. Lorimer,	Girton College, Cambridge. Classical Tutor of Somerville College, Oxford. Admitted as Pfeiffer Travelling Student, 1901—02.
Baroness E. Rosenörn-Lehn,	Royal Holloway College, and University College, London. Admitted 1901—02.

A. P. Oppé,	New College, Oxford. Lecturer in Greek at St. Andrew's University. Admitted 1901—02.
W. L. H. Duckworth,	Fellow of Jesus College, Cambridge. University Lecturer in Physical Anthropology. Admitted 1902—03.
C. T. Currelly,	Victoria College, Toronto. Assistant to Professor Flinders Petrie, under the Egypt Exploration Fund. Admitted 1902—03. Re-admitted 1903–04.
R. McG. Dawkins,	Scholar of Emmanuel College, Cambridge. Craven Travelling Student. Admitted 1902—03. Re-admitted 1903–04.
E. S. Forster,	Bishop Frazer's Scholar, Oriel College, Oxford. Admitted on appointment to the Oxford Studentship, 1902—03. Re-admitted 1903–04.
A. J. B. Wace,	Fellow of Pembroke College, Cambridge. Prendergast Student. Admitted 1902—03. Re-admitted 1903–04.
E. W. Webster,	Taylorian Scholar in German. Fellow of Wadham College, Oxford. Admitted 1902—03.
J. F. Fulton,	Soane Student. Admitted 1902—03.
E. F. Reynolds,	Admitted 1902—03.
O. B. Caspari,	Scholar of Corpus Christi College, Oxford. University Scholar in German. Admitted 1903–04.
J. L. Stokes,	Scholar of Pembroke College, Cambridge. Admitted 1903–04.
Miss M. K. Welsh,	Newnham College, Cambridge. Holder of the Marion Kennedy Scholarship. Admitted 1903–04.

ASSOCIATES OF THE SCHOOL.

Professor J. B. Bury,	Trinity College, Cambridge. Admitted 1895—96.
Rev. A. H. Cruickshank,	The College, Winchester. Admitted 1895—96.
Arthur J. Evans, L.L.D., F.R.S.	Keeper of the Ashmolean Museum, Oxford. Admitted 1895—96.
Ambrose Poynter,	Admitted 1896—97.
J. E. Brooks,	A former Student of the School. Admitted 1896—97.
J. L. Myres,	Student of Christ Church, Oxford; a former Student of the School. Admitted 1896—97.
Professor E. A. Gardner,	Formerly Director of the School. Admitted 1897—98.
Dr. A. van Millingen, M.A., D.D.,	Professor of History, Robert College, Constantinople.
Miss Louisa Pesel,	Directress of the Royal Hellenic School of Needlework.

METHODS OF WORK AND TEACHING.

Extracted from a recent report of the present Director to the Managing Committee.

UNDER an ideal system most students would spend two, some three, seasons in Greece, devoting *the first year to general studies, the second to some special subject.*

During the first year a man need not lose sight of his special subject, but in most cases it would pay him to adopt something like the following programme :

[August and] *September.* In Berlin (Munich, Dresden) to become familiar with spoken German and so be able to profit by some of the 3 or 4 courses of lectures given by the Secretaries of German and Austrian Institutes.

October. Arrive in Greece. Face the difficulties of language and travelling. See Olympia, Delphi, Mycenae, Epidaurus, the Heraeum near Argos, before the rains begin in November.

About *November* 15. Settle down in Hostel for 3 or 4 months of steady work on sites and in Museums, attending some of the half-dozen available courses of lectures, and making frequent short excursions into the country, by train, bicycle, carriage, or on mule-back. A bicycle is invaluable.

This residence in the Hostel, with occasional absences for a few nights in the country, should last until the beginning or middle of March according to the season.

March, April. Travel, study ancient sites.

If possible join one of the island-cruises to which Professor Gardner and Professor Dörpfeld have hospitably admitted students in the past.

May, June. Begin to concentrate attention on special work : *e.g.* a man may assist in excavations, with a view to working upon the results during the coming year and excavating with more or less complete control or independence in his second summer : or he may explore a given district in Greece or Asia Minor, an island or group of islands : or he may work his way homewards through a number of Museums in Italy, Austria and Germany : or attend Mau's summer-course of lectures at Pompeii and afterwards spend some months in Rome and the cooler Etruscan cities. In the latter case he will do well to attach himself to the British School at Rome (Palazzo Odescalchi), where a library is being formed and advice and information may be obtained.

For the *second year* it is impossible to formulate a definite scheme. It should be devoted almost entirely to special work in a narrower field.

The course here suggested must be modified in different ways to suit each case. There will always be men who, like most of the French students, are already specialists in some branch of classical learning and only seek fresh material for research. On the other hand there will be others who wish to see something of all sides of ancient life, to visit sites and battle fields, illuminating and colouring their past reading and fitting themselves for general classical teaching : but have no time for minute archaeological studies.

It is evident that in each year the methods and matter of the teaching at the School must be adapted to the requirements of the students. Students from English universities will never have the love of formal lectures which distinguishes those from America, and where the numbers are small it will often be better to teach, as Dr. Wolters has been in the habit of doing, by means of informal visits to sites and Museums.

RULES AND REGULATIONS

OF THE

BRITISH SCHOOL AT ATHENS.

OBJECTS OF THE SCHOOL.

I. The first aim of the School shall be to promote the study of Greek archæology in all its departments. Among these shall be (i) the study of Greek art and architecture in their remains of every period ; (ii) the study of inscriptions ; (iii) the exploration of ancient sites ; (iv) the tracing of ancient roads and routes of traffic.

II. Besides being a School of Archæology, it shall be also, in the most comprehensive sense, a School of Classical Studies. Every period of the Greek language and literature, from the earliest age to the present day, shall be considered as coming within the province of the School.

III. The School shall also be a centre at which information can be obtained and books consulted by British travellers in Greece.

IV. For these purposes a Library shall be formed, and maintained, of archæological and other suitable books, including maps, plans, and photographs.

THE SUBSCRIBERS.

V. The following shall be considered as Subscribers to the School :—

(1) Donors of £10 and upwards.

(2) Annual Subscribers of £1 and upwards during the period of their subscription.

VI. A corporate body subscribing not less than £50 a year, for a term of years, shall, during that term, have the right to nominate a member of the Managing Committee.

VII. A meeting of Subscribers shall be held in October of each year, at which each Subscriber shall have one vote. A subscribing corporate body may send a representative. At this meeting a report from the Managing Committee shall be presented, including a financial statement and selections from the reports of the Director and Students for the season. At this meeting shall also be annually elected or re-elected the Treasurer and the Secretary of the School, two Auditors, and four members of the Managing Committee, in place of those retiring, under Rule XIII. (3).

VIII. Special meetings of Subscribers may, if necessary, be summoned by the Managing Committee.

IX. Subscribers shall be entitled to receive a copy of any reports that may be published by the School, to use the Library, and to attend the public meetings of the School, whenever they may be in Athens.

THE TRUSTEES.

X. The property of the School shall be vested in three Trustees, who shall be appointed for life, except as hereinafter provided. Vacancies in the number of Trustees shall be filled up at the annual meeting of the Subscribers.

XI. In the event of a Trustee becoming unfit, or incapable of acting, he may be removed from his office by a majority of three-fourths of those present at a special meeting of Subscribers summoned by the Managing Committee for that purpose, and another Trustee shall by the same majority be appointed in his place.

XII. In the event of the death or resignation of a Trustee occurring between two annual meetings, the Managing Committee shall have the power of nominating another Trustee to act in his place until the next annual meeting.

THE MANAGING COMMITTEE.

XIII. The Managing Committee shall consist of the following :—

(1) The Trustees of the School.

(2) The Treasurer and Secretary of the School.

(3) Twelve Members elected by the Subscribers at the annual meetings. Of these, four shall retire in each year, at first by lot, afterwards by rotation. Members retiring are eligible for re-election.

(4) The members nominated by corporate bodies under Rule VI.

XIV. The Committee shall have control of all the affairs of the School, and shall decide any dispute that may arise between the Director and Students. They shall have power to deprive any Student of the use of the school-building.

XV. The Committee shall meet as a rule once in every two months ; but the Secretary or Treasurer may, with the approval of two members of the Committee, summon a special meeting when necessary.

XVI. Due notice of every meeting shall be sent to each member of the Committee by a summons signed by the Secretary. Three members of the Committee shall be a quorum.

XVII. In case of an equality of votes, the Chairman shall have a second or casting vote.

XVIII. In the event of vacancies occurring among the officers or on the Committee between the annual elections, they may be provisionally filled up by the Committee until the next annual meeting.

STUDENTS AND ASSOCIATES.

XIX. The Students shall consist of the following :—

(1) Holders of travelling fellowships, studentships, or scholarships at any University of the United Kingdom or of the British Colonies.

(2) Travelling Students sent out by the Royal Academy, the Royal Institute of British Architects, or other similar bodies.

(3) Other persons who shall satisfy the Managing Committee that they are duly qualified to be admitted to the privileges of the School.

No person shall be admitted as a Student who does not intend to reside at least three months in Greek lands.

XX. Students attached to the School will be expected to pursue some definite course of study or research in a department of Hellenic studies, and to write in each season a report upon their work. Such reports shall be submitted to the Director, shall by him be forwarded to the Managing Committee, and may be published by the Committee if and as they think proper.

XXI. Intending Students are required to apply to the Secretary. They will be regarded as Students from the date of their admission by the Committee to the 31st day of October next following; but any Student admitted between July 1st and October 31st in any year shall continue to be regarded as a Student until October 31st of the following year.

XXII. The Managing Committee may elect as Associates of the School any persons actively engaged in study or exploration in Greek lands; and may also elect as honorary members such persons as they may from time to time think desirable.

XXIII. Students, Associates, and honorary members, shall have a right to use the Library of the School, and to attend all lectures given in connexion with the School, free of charge.

XXIV. Students shall be expected to reside in the Hostel provided for them, except with the sanction of the Managing Committee. Priority of claim to accommodation in the Hostel shall be determined by the Committee.

THE DIRECTOR.

XXV. The Director shall be appointed by the Managing Committee, on terms which shall be agreed upon at the time, for a period of not more than three years. He shall be eligible for re-election.

XXVI. He shall have possession of the school-building as a dwelling-house; but Students of the School shall have a right to the use of the Library at all reasonable times.

XXVII. It shall be his duty (1) to guide and assist the studies of Students and Associates of the School, affording them all the aid in his power, and also to see that reports are duly furnished by Students, in accordance with Rule XX., and placed in the hands of the Secretary before the end of June; (2) to act as Editor of the School Annual.

XXVIII. (*a*) Public Meetings of the School shall be held in Athens during the season, at which the Director and Students of the School shall read papers on some subject of study or research, and make reports on the work undertaken by the School. (*b*) The Director shall deliver lectures to Students of the School. At least six of such meetings and lectures shall be held in the course of each session.

XXIX. He may at his discretion allow persons, not Students of the School, to use the Library and attend his lectures.

XXX. He shall be resident at Athens from the beginning of November in each year to the end of the following June, but shall be at liberty to absent himself for short periods for purposes of exploration or research.

XXXI. At the end of each season he shall report to the Managing Committee—(i) on the studies pursued during the season by himself and by each Student; (ii) on the state of the School-premises and the repairs needed for them; (iii) on the state of the Library and the purchases of books, &c., which he may think desirable; and (iv) on any other matter affecting the interests of the School.

XXXII. In case of misconduct the Director may be removed from his office by the Managing Committee by a majority of three-fourths of those present at a meeting specially summoned for the purpose. Of such meeting at least a fortnight's notice shall be given.

RULES FOR THE MACMILLAN HOSTEL.

XXXIII. The Hostel shall be managed by the Students for the time being, subject to the control of the Director.

XXXIV. The Director shall have power to exclude a Student from the Hostel in case of misconduct; but such exclusion must be immediately reported to the Managing Committee.

XXXV. The Students shall, until further notice, pay a fixed charge of 20 drachmas (paper) a week for their rooms, this payment to include fire, lighting, and the necessary servants' wages.

XXXVI. Associates of the School, members of the Committee, and ex-directors, may be admitted to residence in the Hostel. Other persons, if seriously engaged in study or research, may be admitted by the Director at his discretion. But no person shall reside in the Hostel under this rule to the exclusion of any Student desiring admission.

XXXVII. The weekly charge for residents other than Students shall be 30 drachmas (paper) until further notice.

XXXVIII. The Director shall draw up further rules for the internal management of the Hostel; such rules to be subject to the approval of the Managing Committee.

RULES FOR THE LIBRARY.

XXXIX. The Director shall have power to make rules for the management of the Library, its use by Students, and the like; such rules to be subject to the approval of the Managing Committee.

PUBLICATION.

XL. No publication whatever, respecting the work of the School, shall be made without the previous approval of the Committee.

THE FINANCES.

XLI. All money received on behalf of the School beyond what is required for current expenses shall be invested in the names and at the discretion of the Trustees.

XLII. The banking account of the School shall be placed in the names of the Treasurer and Secretary, who shall sign cheques jointly.

XLIII. The first claim on the revenue of the School shall be the maintenance and repair of the School-building, and the payment of rates, taxes, and insurance.

XLIV. The second claim shall be the salary of the Director, as arranged between him and the Managing Committee.

XLV. In case of there being a surplus, a sum shall be annually devoted to the maintenance of the Library of the School and to the publication of a report; and a fund shall be formed from which grants may be made for travelling and excavation.

Revised, 1899.

MANAGING COMMITTEE, 1904—1905.

EDWIN FRESHFIELD, ESQ., LL.D.
SIR RICHARD JEBB, Litt.D., D.C.L., LL.D., M.P.
GEORGE A. MACMILLAN, ESQ., D. Litt., *Chairman.*
} *Trustees.*

D. B. MONRO, ESQ., M.A., Provost of Oriel. Appointed by the University of Oxford.
PROFESSOR J. E. SANDYS, Litt.D. Appointed by the University of Cambridge.
SIDNEY COLVIN, ESQ., M.A. Appointed by the Hellenic Society.

REGINALD BLOMFIELD, ESQ., M.A., F.S.A., A.R.A.
ARTHUR J. EVANS, ESQ., LL.D., F.R.S.
PROFESSOR ERNEST GARDNER, M.A.
PROFESSOR PERCY GARDNER, Litt.D.
MISS JANE E. HARRISON, D.Litt., LL.D.
D. G. HOGARTH, ESQ., M.A.
R. J. G. MAYOR, ESQ., M.A.
J. LYNTON MYRES, ESQ., M.A.
VINCENT YORKE, ESQ.
CECIL HARCOURT SMITH, ESQ., LL.D.
PROFESSOR J. S. REID, Litt.D.
PROFESSOR CHARLES WALDSTEIN, Litt.D.
} Appointed by the Subscribers.

WALTER LEAF, ESQ., Litt.D., *Hon. Treasurer*, 6, Sussex Place, Regent's Park, N.W.
JOHN ff. BAKER-PENOYRE, ESQ., M.A., *Secretary*, 22, Albemarle Street, W.

DIRECTOR, 1904—1905.

R. CARR BOSANQUET, ESQ., M.A., Trinity College, Cambridge.
Assistant-Director.—M. N. TOD, ESQ., M.A., Fellow of Oriel College, Oxford.

British School at Athens.

This School (founded in 1886) gives to British Students of Greek Archaeology and Art the opportunity of pursuing their researches in Greece itself, with command of the means which the recent great advances of the science have rendered indispensable.

Athens is now an archaeological centre of the first rank. The architecture of Greece can nowhere else be studied to such advantage; and the concentration in the Athenian museums of numerous and most important discoveries which have taken place on Greek soil in the last few years has made a personal knowledge of those museums in the highest degree desirable for Hellenic scholars.

The student requires two auxiliaries when working in Athens. Firstly, the command of an adequate library; and secondly, the advice of a trained archaeologist, residing on the spot, and following the rapid advances of the science, due partly to new discovery and partly to the rearrangement of old materials.

These advantages are now provided for French, German, Austrian, American, and British archaeologists, through the Schools which their nationalities have established. It is also by means of these Schools that many excavations on Greek soil have been carried out; and those conducted in Cyprus, in the Peloponnese, in Melos and in Crete by the British School during the past sixteen Sessions are an encouraging proof of the work that may be done in the future if the School be adequately supported.

Students are admitted free of charge. The principal conditions imposed are that they shall pursue some definite course of Hellenic study or research, residing for the purpose not less than three months in Greek lands, and that they shall at the end of the Session write a report of the work which they have done. Applications from intending students should be made to the Secretary, John ff. Baker-Penoyre, Esq., 22, Albemarle Street, W., who will also be happy to supply any further information.

Donations or annual subscriptions to the School are greatly needed, and will be gladly received and acknowledged by the Hon. Treasurer, Walter Leaf, Esq., 6, Sussex Place, Regent's Park, N.W.

May 1905.

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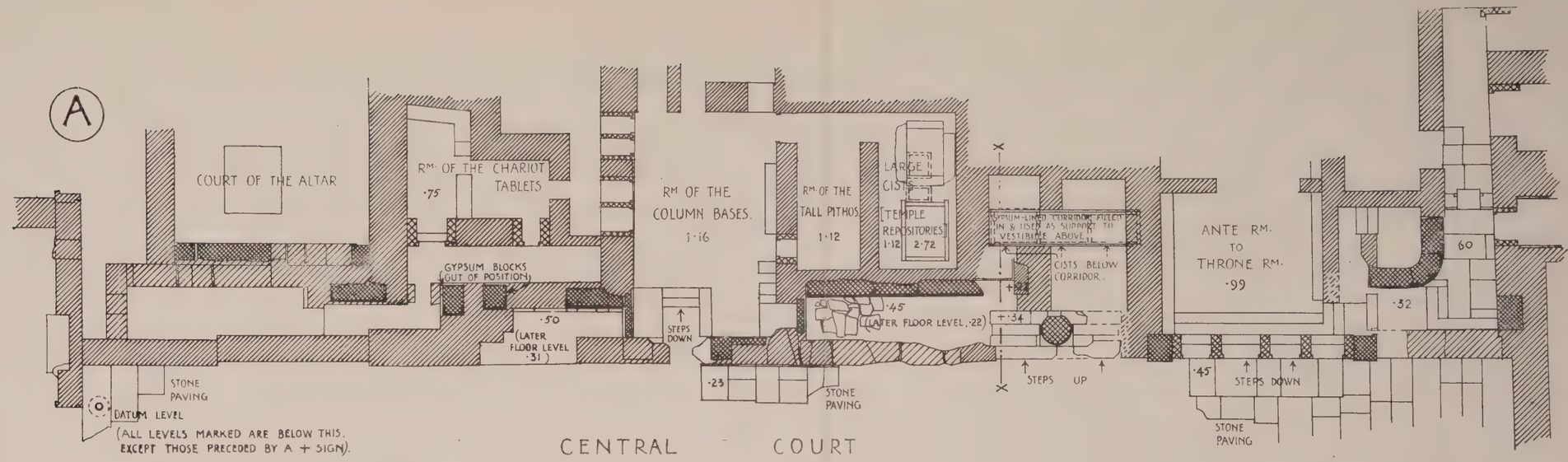

A Existing Remains on W. Borders of Central Court, showing Frontage of Palace as finally Remodelled.

B. Remains of Original Frontage Line on this Side with Indications of the Missing Sections.

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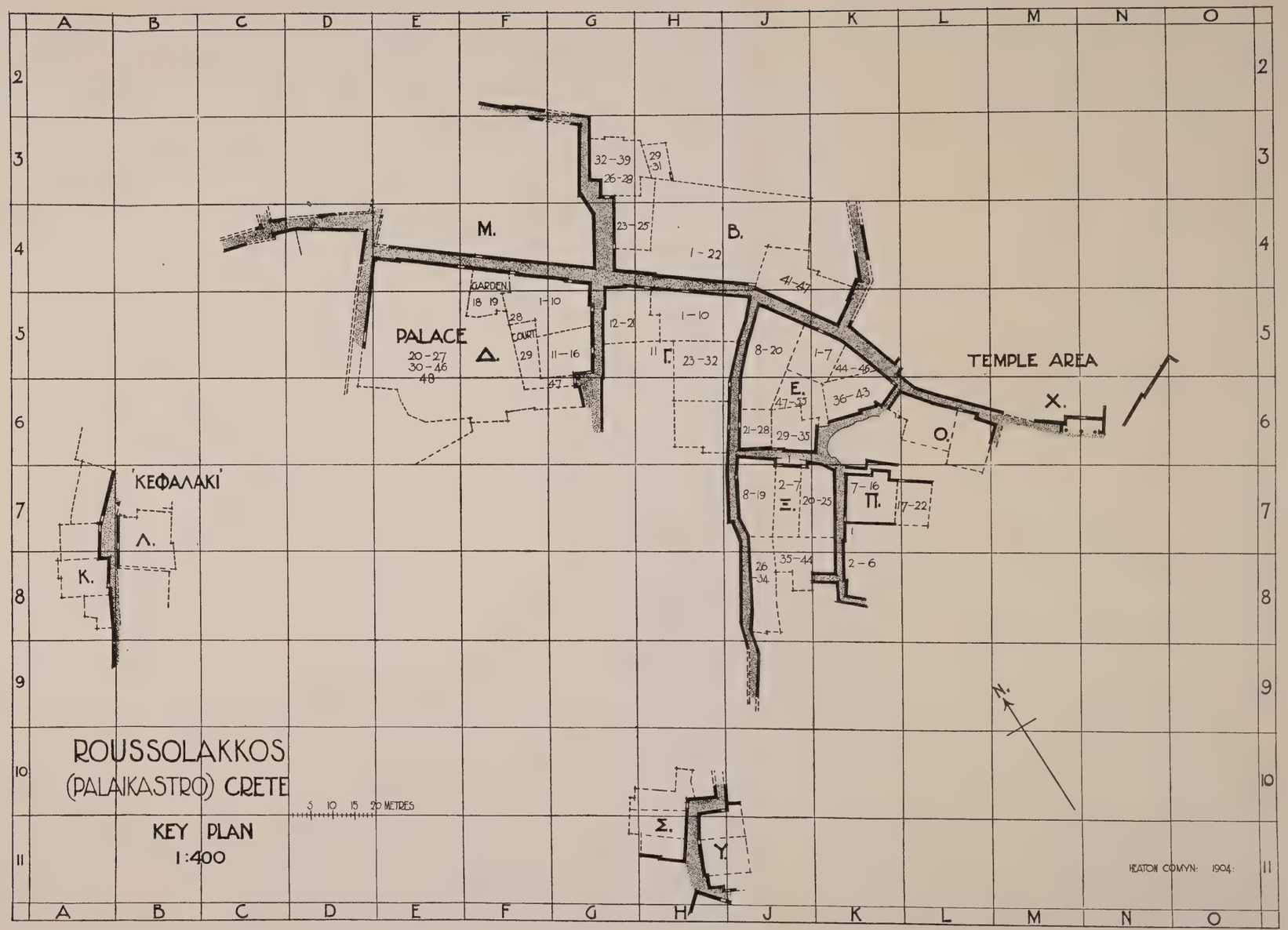
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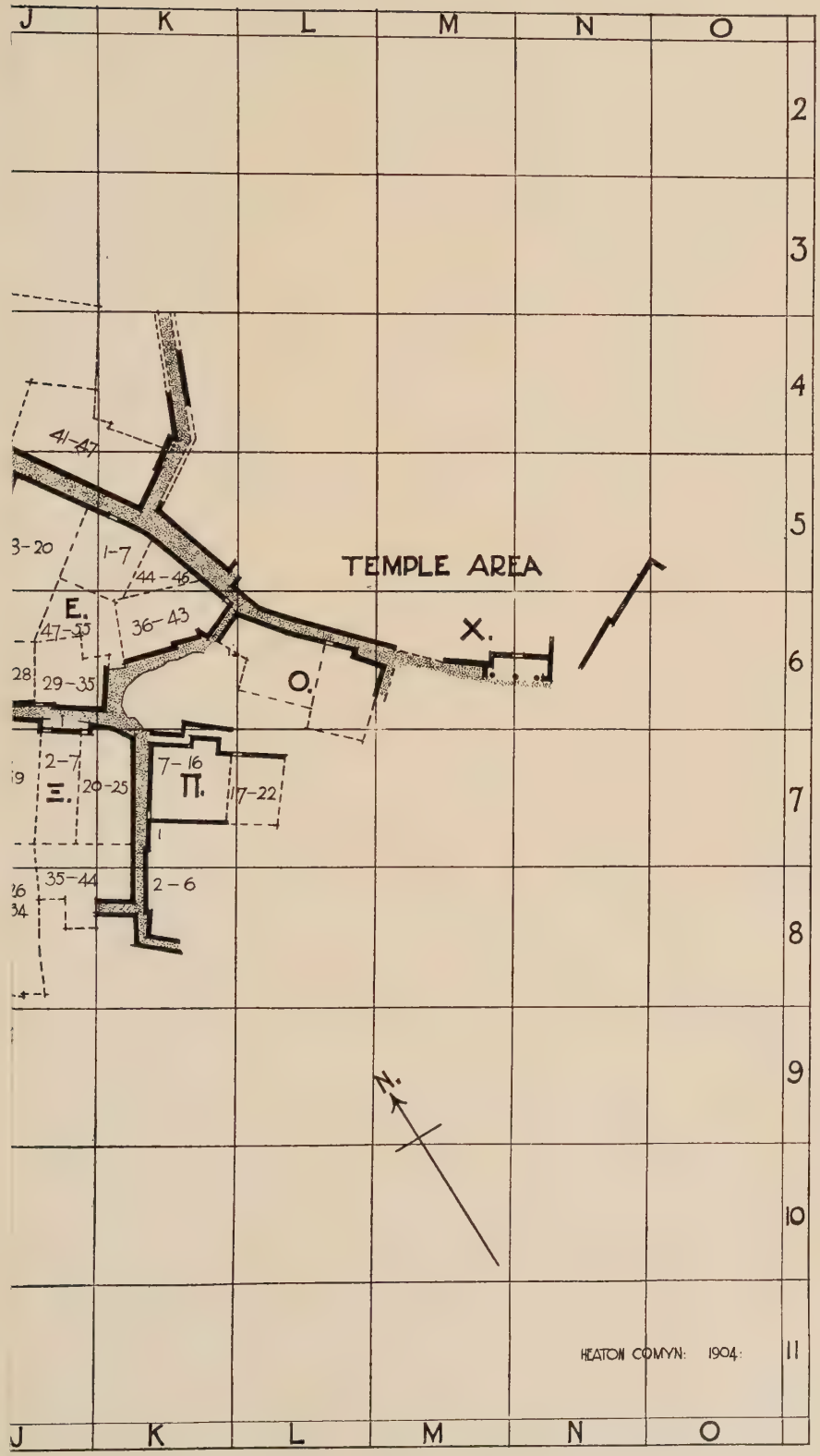
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